

# ♦ HEALTH ♦

A WEEKLY JOURNAL OF  
DOMESTIC AND SANITARY SCIENCE.

"Reason's whole pleasure—all the joys of sense—  
Lie in three words, HEALTH, PEACE, and COMPETENCE."—*Pope.*

EDITED BY DR. ANDREW WILSON, F.R.S.E. &C.

VOL. XI.—No. 262.

FRIDAY, APRIL 13, 1888.

[PRICE TWOPENCE.]

BRAND & CO.'S  
INVALID  
SOUPS,  
Potted Meats,  
PRESERVED  
PROVISIONS, ETC.



BRAND & Co.'s  
A1 SAUCE.

A fine Tonic and Digestive.

An excellent Relish for  
"Fish, Flesh, or Fowl."

Under the direct Patronage of the British, United States, Canadian, and other Governments.



## Dr. PIERRE'S

(Member of the Faculty of Medicine, Paris)

CELEBRATED

### DENTIFRICE LOTION (FOR THE TEETH AND BREATH),

TOOTH PASTE, TOOTH POWDERS, & SUPERIOR TOILET VINEGARS.

ESTABLISHED 50 YEARS. 18 PRIZE MEDALS.

Samples sent gratis on application.

39b, OLD BOND-STREET, LONDON, W.

Friehmelt's  
**COCA**-  
and  
Cigarettes  
Tobaccos.

## TOBACCO

STRENGTHENS WEAK HEARTS.  
ABSOLUTELY FREE FROM NICOTINE.

## CIGARETTES

The only Tobacco which is Non-Enervating, and recommended by the Medical Faculty. Smokers can now enjoy the pleasures of the weed and feel Healthier and Stronger after its use.

Cigarettes, 8s. per 100; £3 6s. 8d. per 1,000. Second quality, 6s. per 100; £2 12s. 8d. per 1,000. Packets of 20, 2s.; second quality, 1s. 6d.

Tobacco, strong or mild, 2-oz. packets, 1s. 6d.; or 10s. per lb., from 3 lbs. and upwards.

SOLE CONSIGNEES FOR THE UNITED KINGDOM AND THE COLONIES—

THE FRENCH HYGIENIC SOCIETY, 56, CONDUIT-ST., REGENT-ST., LONDON, W.

TRADE MARK.

## "SANITAS"

TRADE MARK.

## DISINFECTANTS

(FLUIDS, POWDER, SOAPS), Non-Poisonous, Pleasant, and Best.

Used by more than 1000 BOARDS OF HEALTH & HOSPITALS. GOLD MEDALS—CALCUTTA, 1883-4; PARIS, 1885; ANTWERP, 1886.

OF CHEMISTS, GROCERS, OILMEN, AND STORES.

The "SANITAS" COMPANY, Ltd., Letchford's-buildings, Bethnal Green, London.

BOSTON MEDICAL LIBRARY  
IN THE  
FRANCIS A. COUNTWAY  
LIBRARY OF MEDICINE

GOLD MEDALS—EDINBURGH, LIVERPOOL, 1886.



# MARSHALL'S

## PREPARATIONS

# of WHEAT

**FAROLA. TRITOLA. GRANOLA.**  
Pure, Digestible, Nourishing Foods.

THEY SHOULD BE USED IN EVERY HOUSEHOLD.

**PTYALOID.** A Vegetable Digestive of Starch—  
The best aid in Dyspepsia.

JAMES MARSHALL, Ibrox Flour Mills, GLASGOW.

Descriptive Pamphlet sent post free.

SAMPLE PACKETS FREE FOR 6D. EACH.

**TEETH.****A COMPLETE SET, ONE GUINEA.**

Single Tooth, 2s. 6d.

FIVE YEARS' WARRANTY.

Dr. ANDREW WILSON, late R.N., says:—"I can recommend Mr. Goodman as a very skilful and humane dentist. His reasonable charges should attract to him all classes."

**MR. GOODMAN, Surgeon Dentist,**

(Late Manager for Messrs. Eskell.)

41, LUDGATE HILL (Opposite Old Bailey).

Hours 10 to 8.

Also at 68a, Market, Manchester; 30a, Bold-street, Liverpool; 57a, Boar-lane, Leeds; 1, Piccadilly, Bradford; 8, Pavilion Buildings, Brighton; 251, Sauchie-hall-street, Glasgow, 29, Hanover-street, Edinburgh, &c., &c.

**HUTTON'S  
FOOT POWDER**Is Guaranteed Effectual  
and Harmless.*Easily applied and  
Cleanly.*Enables New and Tight  
Boots to be worn  
with Ease.

**PREVENTS ALL  
CHAFINGS, GALLS,  
AND  
UNPLEASANTNESS.**

In Tins at 1s. and 6d.,  
Post Free (under cover),  
Fifteen or Eight Stamps,  
Samples, Two Stamps, of

**TYLEE & CO., 7, BRIDGE-STREET, BATH.**

LONDON: BARCLAY, and through all Patent Medicine Vendors.

NOW READY. Crown 8vo, cloth, price 7s. 6d.

# HEALTH FOR THE PEOPLE.

By DR. ANDREW WILSON.

**Reprinted from HEALTH, with Revisions.****CONTENTS.**

A Heart in the Wrong Place.  
Sleep-Walking and Related Conditions of Mind.  
Good Remedies Out of Fashion.  
Miracle Cures and Their Explanation.  
The Case of Louise Lateau.  
Plants in Bedrooms.  
Disease and Art.  
A Few Words on Bathing.  
Fish as Food.  
A New Pain-Killer.—The "Six-Fingered" Condition and Its Inheritance.—Disease and the Transformations of Man.—Can Con-

sumption be Communicated?—Meat Teas.—The Balance of Power in the Human Body.—Nature's Mode of Cure.—The Restoration of "Dead" Animals.—Medicine in Queen Anne's Days.—Curious Facts about Memory.—Some Tricks of Memory.—The Improvement of the Memory.—The Nature of the Memory.—How to Strengthen the Memory.—Hydrophobia: Its Nature, Causes, and Treatment.—Hydrophobia and Its Prevention.—The "Germ Theory" of Disease.—The Care of the Teeth.—The Skin in Relation to Health.—The Hair.—The Care of the Hair.—The Love of the Hair.—The Hair and Its Treatment.—Hair Troubles and Their Remedies.—The Hair and Its Troubles.—Hair Dyes.—The Hair and Hair Dyes.—The Care of the Beard.

LONDON: SAMPSON LOW, MARSTON, SEARLE, &amp; RIVINGTON, 188, FLEET-STREET, E.C.

## ◆ HEALTH ◆

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &amp;c.

LONDON: FRIDAY, APRIL 13, 1888.

## CONTENTS OF No. 262.

|                                  | PAGE |                                   | PAGE  |
|----------------------------------|------|-----------------------------------|-------|
| Notes by the Way: By the Editor. | 17   | Jottings from the Journals:—      |       |
| Original Essays:—                |      | Genis in our Homes—Sweaters'      |       |
| About Drugs and Drugging. By     |      | Dens .....                        | 27    |
| M. D. ....                       | 18   | IMPORTANT ANNOUNCEMENT.—          |       |
| "Like Begets Like." By Dr.       |      | Commencement of a New             |       |
| E. J. Dungate. Second Paper.     | 20   | Volume of "HEALTH" .....          | 23    |
| Personal Health:—                |      | Sanitary Appliances, &c.:—        |       |
| The New Revolution in Disease    |      | Pure Water .....                  | 28    |
| Treatment .....                  | 22   | Our Letter Box:—                  |       |
| The Family Circle:—              |      | Rules for Correspondents .....    | 29    |
| Emotions versus Health in Women. |      | Letters to the Editor:—Mr. Tebb's |       |
| By Mary T. Bissell, M.D. ....    | 23   | Allegations Regarding Cancer      |       |
| Popular Science Papers:—         |      | and Vaccination—Anti-Vaccin-      |       |
| On the Power of Music and its    |      | nationalists and their Cancer     |       |
| Place in Medicine. By Guy C.     |      | Scare .....                       | 29-30 |
| Rothery. Second Paper .....      | 24   | Queries and Answers:—Replies:     |       |
| Public Health:—                  |      | General, Sanitary, and Medical.   | 31    |
| The Meat Food-Supply of the      |      |                                   |       |
| Nation and its Future. By Axel   |      |                                   |       |
| Ames, Jr., M.D. Second Paper.    | 25   |                                   |       |

## Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—Herder.

UNDER the title of "The Nose the Source of all our Woes," a correspondent remarks that a German physician reported several cases of mental disturbance characterized by an impossibility of fixing the attention on any subject, except for a very brief period, or of prolonged mental effort of any kind whatever. This condition, to which the author gave the name of "aproxia," was always associated with certain lesions of the mucous membrane of the nose and obstruction to the passage of air through the nasal passages.

THIS is the latest accusation which has been brought against the sinful nose. Headache, cough, earache, neuralgia, hay fever, acne, convulsions, and syncope are only a few of the many evils which this troublesome organ is accused of having inflicted upon long-suffering man. As regards the new ailment above noted, however, it is said not to be a reflex action, and the mechanism of its production is assumed to be a purely physical one. The

spaces beneath the outer brain membrane have been found to be in direct communication with the mucous membrane of the nasal passages, and inflammation of the latter is supposed to interfere with the elimination of the waste products resulting from brain-activity, thus leading to mental sluggishness. But whatever may be its methods, the nasal organ is regarded as responsible for many, if not most, of our ills. Clearly, the nose must go, and one may inquire "what next?" in the list of novel ailments.

◆ ◆ ◆

I OBSERVE that at a meeting of the Surgical Society of Paris, M. Duguet described a case of lead poisoning. The patient, a woman aged 38, was employed in a factory where coloured cardboard boxes are made by machinery. Her business was to gum small bands of paper on these boxes, which were intended to hold reels of cotton. These paper bands are coloured red and orange on one side, being grey on the other side, which is covered with gum. In taking up these bands, which are packed in layers, the patient was obliged to wet her finger with her tongue each time, and slip off each band, of which the red and orange side is placed uppermost, with her finger.

◆ ◆ ◆

THE grey side of the band had then to be licked, and the band gummed on the box. The patient had frequently gummed as many as 5,000 of these bands in one day. She stated that her companions (eight or ten) who did the same work, all became pale and thin, and suffered from colic. Those who were employed in pasting on blue-coloured bands of paper were not affected with any morbid symptoms. The red and orange bands of paper were analysed by M. Gur. The residue of the paper, when burnt, gave all the reactions of salts of lead. Each band contained about 12 milligrammes of metallic lead. This form of lead poisoning has not been described before. M. Monod, says the report, suggested that the case should be reported to the Prefect of Police.

◆ ◆ ◆

At a recent meeting of the New York Academy of Medicine, Dr. Girdner of New York exhibited his telephonic bullet-probe. The interesting feature of this probe is that it is operated by a current of electricity extracted from the body of the patient himself, in whom is desired to locate a metallic missile. The construction of this probe is as follows: to each of the two terminals of a telephone-receiver, an insulated flexible wire, about

## "THE TASTELESS APERIENT."

## HUNGARIAN NATURAL MINERAL WATER.

The Salts of ÆSCULAP contain 90 per cent. of purgatives.

HIGHEST AWARD

AT THE

INTERNATIONAL MEDICAL EXHIBITION, London, 1887.

"This Water contains the SULPHATES OF MAGNESIUM AND SODIUM in unusually large quantities. IT IS AN ADMIRABLE APERIENT WATER—one of the most powerful, indeed, that we have examined, and may be used with perfect confidence."—THE LANCET, Sept. 26th, 1885.

AGENTS:

INGRAM &amp; ROYLE,

London, Liverpool, &amp; Bristol.

AND OF ALL CHEMISTS.

four feet long, is connected. At the free end of one of these wires a hollow, bulbous piece of steel is attached. At the free end of the other wire is a suitable handle, in which a probe may be placed, and held by a clamp-screw.

♦ ♦ ♦

THE internal arrangement of the handle is such that a perfect electrical contact exists between the end of the probe and that of the wire which terminates in the handle: the same is true for the end of the other wire and the steel bulb. When a current of electricity is passed through the coil in the receiver by means of the bulb and the probe, each time that the current is made and broken a clicking or rasping sound is heard in the receiver held to the ear.

♦ ♦ ♦

ALL sounds are shut out except that heard when the bullet is touched; and the apparatus is so constructed that both hands are left free. In describing the application of this probe, Dr. Girdner mentioned a case seen in practice, in which a musket-ball had lain between the bones of the leg for twenty-two years. When an ordinary probe was passed, hard substances could be felt in many places, but it could not be told whether they were bone or bullet.

♦ ♦ ♦

THE porcelain probe, invented by the distinguished French surgeon, Nélaton, was of no use, as the bullet was so covered by a thick crust of salts of lead as not to be marked when it was rubbed against the bullet. When the telephonic probe was passed, no response came so long as bone and other tissues were touched; but the moment the probe came in contact with the bullet, a clicking and rasping sound was heard in the telephone. During this test the steel bulb was held in the patient's mouth.

♦ ♦ ♦

THE fact that ostriches and many other birds swallow stones and other objects by way of assisting the trituration of their food is well known. A curious communication was lately made to a scientific society on stones in seals' stomachs. Seals, it may be remarked, are fish-eating quadrupeds, divided into two classes—the Phocæ, or common seals, with rudimentary ears; and the Otariæ (sea-lions, bears, elephants), which have the ears developed. According to the seal-hunters, the "eared" seals (from whose fur sealskin is derived) have an internal pouch known as the "ballast bag," because it is always found to contain a number of rounded stones. The presence of these is accounted for by saying that when the animals grow very fat they become so buoyant as to be unable to sink below the surface of the water without the aid of some ballast, which they secure by swallowing stones.

♦ ♦ ♦

THIS theory implies the possession by the seals of considerable reasoning power. Observations have shown that the so-called "ballast bag" is only the stomach; and accordingly some people have suggested that the stones are intended to assist in the trituration of food, in somewhat the same manner as in the gizzard of fowls. Other persons suppose the stones subserve no useful purpose, and are accidentally introduced with the food, or in play. In the seals and sea-lions at the London Zoo, similar rounded stones have been found, large numbers of which are quite foreign to the geological character of the district. A Newfoundland seal, which died at the Clifton Zoo in 1886, was examined by Dr. Harrison, who found in the stomach gravel, nuts, and pieces of stick.

## Original Essays

"Life is not to live, but to be well."—*Martial*.

### ABOUT DRUGS AND DRUGGING.

By M.D.

THE natural desire of mankind for cure when they fall ill seems to be mainly expressed by the act of flying to medicinal substances for relief. Few persons reflect upon the origin and meaning of this custom. In all probability it arose from the idea that disease, as a something which had invaded the body, was to be driven therefrom by another something in the shape of a drug. Long before humanity had arrived at correct notions of the virtues and qualities of medicinal substances, the art of primitive medicine must have formulated some such idea as that just noted. Man's search after foods, his experiences of the effects of herbs and minerals, doubtless led him, in a very natural fashion, to extend such experiences to the cure of disease. A herb which, when eaten, was found to produce a particular effect, would become elevated to the rank of a medicine when the effect in question was regarded as likely to be curative of disease. Even the rudest observation in time culls valuable experience; and the medical lore of savages is accordingly found to be much more complex than might at first sight be imagined. Friar Laurence's exclamation in "Romeo and Juliet," about the "mickle grace" in the way of medicine that lies hid in the various productions of nature, is really an explanation of the rise of primitive medicine. It was as natural, in short, for early man to utilize his experiences of herbs and minerals for the cure of his diseases, as to test the suitability of these and allied substances in the way of foods.

The first stages of the medical art were unquestionably those which "empiricism" or the fruits of experience naturally evolved. The art of medicine thus long preceded its science. Art furnishes the practice; science provides the explanations of, and the reasons for, the practice. The great and paramount distinction, in fact, between rational scientific medicine and rampant quackery is found in this statement. The quack administers his drugs and nostrums by "rule-of-thumb" practice. He has seen such and such results follow after giving certain drugs; and his expectation that these results will always attend his exhibition of the same drugs is the basis of his practice. Furthermore, he has no means or science of distinguishing the cases wherein it is proper to give his drugs. He cannot give reasons for his medical actions.

The scientific physician, on the contrary, while expecting that the action of each drug will be tolerably uniform, is alive to the fact that each case is liable to exhibit special peculiarities—"idiosyncrasies," as they are called—in respect of the action of a drug. Again, he possesses scientific knowledge regarding the action of the drug he administers. He knows its effects on the healthy tissues, and is able to argue on this basis how its administration will affect the body in disease. Best of all, he has no faith in panaceas, and, unlike the quack, does not claim that any one drug can possibly serve as a remedy for each and every ill to which flesh is heir. This is the spirit of rational medicine. It begins in empiricism; it is founded on laws of

experience, written and unwritten alike; but sooner or later it is elevated into the rank and can claim the title of a science, because the physician is able to give adequate reasons for his procedures.

It must, of course, be admitted that, as regards the action of many drugs, and as concerns the exact methods in which many medicinal substances act, we are, as yet, largely in the dark. Science learns to labour; but it has also to learn to wait, and knowledge grows "from more to more" by slow degrees. Still, the results, of experience, and of that form of regulated experience we call "experiment," aid us largely in understanding the manner in which drugs influence the processes of the body. Let us illustrate the exactitude of knowledge regarding the action of drugs by a reference to one or two well-known principles according to which medicines are scientifically given.

If we select the class of "purgative medicines," we find ourselves confronted by a very large number of substances, all classed under that common name, and as such, all specially liable to be abused in the hands of the ignorant. From aloes, rhubarb, mercury, castor oil, jalap, scammony, turpentine, colocynth, croton oil, and senna, to Epsom salts and manna, we may ring the changes on the names of so-called purgative drugs. Now, when regulated science comes into the field of observation, as distinguished from rule-of-thumb practice, we first of all discover that the above drugs are classified into certain well-defined sections or groups. The object of classifying anything, from books to animals or plants, is to bring together things which are like and to separate those which are unlike. Therefore, by classifying our drugs, we are enabled to place in the same category those which possess similar actions—or, what is much the same thing, those which act on the same portion of the digestive system. It must be borne in mind that the digestive system consists of a somewhat complex arrangement of organs, comprising a tube (along which food passes, and of which the stomach is only an expansion) and glands (liver, sweetbread, &c.) attached to the sides of the tube, or imbedded in its walls. Clearly, then, the need for classifying into proper divisions the drugs which affect one part or another of this complicated system, becomes very patent.

Suppose we select aloes as an example, we note that this substance is specially noted for its action on that part of the intestine or bowel called the *colon*. This forms the greater part of the large intestine. Rhubarb, on the other hand, has a much more general action, not merely on the intestine, but on the liver as well. Colocynth, again, has a special effect on the muscular coat of the intestine, and on the glands of the intestine and liver. From observations like these, then, it becomes possible to class the popularly common and single division of "purgatives" into at least five groups. There are, firstly, drugs which cause increased secretion in the digestive tube, and render its movements more active. Such are croton oil, large doses of colocynth, gamboge, and elaterium. Then comes a second group of substances, which, in addition to causing increased secretion and movement, we find produce further disturbance of the natural action of the intestine. Such are the various compounds of potash and of soda, along with sulphate of magnesia. In the third division—represented by mercury, jalap, scammony, podophyllin, tobacco, colocynth, &c.—are classed drugs which stimulate movement, increase secretion, and produce some degree of catarrh of the mucous membrane, thus in some respects resembling the first class of substances, but being of less

active nature. Our fourth group deals with simple purgatives. These merely act by stimulating the movements of the intestine, and include rhubarb, senna, and aloes. The laxative or aperient class, forming the fifth group, act by simply increasing the movements of the intestine to a moderate extent only. Castor oil, sulphur, manna, tamarind, magnesia, belladonna, cascara, stramonium, taraxacum, glycerine, honey, and olive oil illustrate this concluding section.

It is undeniable that the above classification is not of an essentially rigid nature. One substance may unite in itself actions proper to two or more of the classes above enumerated. Senna may thus be said to belong to both fourth and fifth groups as just defined. The complex nature of the human frame forbids us to expect mathematical accuracy in our dealings with its action, either in health or in disease; but the classification just noted shows clearly enough how the science of drugs, as distinguished from a mere rule-of-thumb knowledge of them, supplies the physician with accurate enough knowledge of their effects. The value of such knowledge, it need scarcely be added, is found in the doctor's ability to select the particular drug which will best and most speedily cure or relieve the diseased condition he has discovered to exist.

Another apt illustration of the need for knowing accurately the special actions of drugs is found in the case of the remedies (known as "anthelmintics") which kill or expel the different kinds of parasitic worms from the digestive system. Thus, for tape-worm, we prescribe male-fern, turpentine, kusso, kamala, or pomegranate root; while for the round-worm *santonin* is the approved remedy. For the small thread-worm, on the other hand, salt, calumba, quassia, or iron is prescribed.

If, as a final example, we select that much-abused organ, the liver, and note the knowledge we already possess regarding the action of drugs of different classes upon it, we may once again realize the importance of accurate research in the field of remedial agents. "Something to act upon the liver," is a common demand of every-day life; yet to select the proper "something" is a matter involving a threefold knowledge of what the liver does in health, from what special form of disturbance it suffers, and what remedy is best calculated to dispel or cure its disordered condition. Thus we may cure more than one form of liver-ailment by rigid attention to the patient's diet, using food as medicine. We may affect it by giving mercury, which appears to act indirectly by causing the outflow of already formed bile, and by thus leading to the formation of new bile. Or we may stimulate it (as by antimony and arsenic), or depress it (as by opium); or finally, we may attack the liver more directly by giving such drugs as podophyllin, rhubarb, aloes, colocynth, &c. These latter substances appear to stimulate the liver directly, and thus increase the amount of bile it secretes.

These illustrations may serve to render plain the contention of this paper, that rational medicine, in the matter of drugs at least, consists in an accurate knowledge of how each drug acts upon the frame, and in thus selecting, after an ailment has been clearly distinguished, the special medicine calculated to remove its cause.

There are certain other considerations regarding drugs, the recital of which may prove of service in educating the public mind to a knowledge of the principles of rational medicine. These further remarks, however, must be reserved for another paper.

## "LIKE BEGETS LIKE."

BY DR. E. J. DUNGATE.

SECOND PAPER.

### PECULIARITIES IN STRUCTURE.

DR. JULIUS HENRY STEINAU, in his "Pathological and Psychological Essay on Hereditary Diseases," says: "I have met with the following singular instance of the hereditary transmission of an accidental lesion. A cat, while pregnant, had nearly the whole of an ear bitten off by a rat; and one kitten, still living, in the litter of which she was in due time delivered, had but one ear. This peculiarity has not, however, descended to another generation." It was stated before a meeting of the Société de Biologie that Dr. Muron had excised the spleen in a dog and a bitch; the result was that not one of the dogs born from that couple possessed a spleen. A similar experiment is recorded in the *Lancet* for March 12, 1881, where it is stated that M. Massoin had investigated the heredity of certain lesions, and published the results in the *Bulletin de l'Académie Royale de Belgique*. He excised the spleen in several generations of rabbits, with the result that in the first generation that organ was always in an atrophied condition. In the second generation, strange to say, there was no further diminution in size. Matzuis has also demonstrated that the offspring of rabbits, in which the spleen has been excised, are sometimes born without a spleen.

Waitz, in his "Introduction to Anthropology," mentions an officer who was wounded on the forehead, and his children had a mark like a cicatrix on their foreheads. He refers also to the case of an officer who had the little finger of his right hand severely injured, so that it was permanently crooked. All his sons had the same finger crooked exactly as their father's was. Lorry relates the following: "A general had been hit in a battle by a ball on the collar-bone, the middle of which was taken out, and the remaining portions grew to the soft parts surrounding them, leaving an empty space. His wife afterwards bore him a daughter, who had the same defect in the collar-bone." Another good example of the transmission of an accidental defect is quoted by Steinau: "A soldier lost in war one of his eyes; he returned to his country and married; his wife bore him a son, one of whose eyes was quite dried up, so that he was monocular, like his father."

In his work on "Hereditary Diseases," Mr. Whitehead tells us that the father of three healthy children accidentally lost a limb in a coal-mine, and the next child that was born to him had a shortening in the corresponding limb. Professor Rolleston told Darwin that two such cases had come under his observation. One man had his knee cut; another had his cheek severely cut: both of these men had children who were born with the same spot marked or scarred. At one of the meetings of the Société de Belgique, Dr. Brown-Séquard mentioned a man who had a peculiar deformity in the lower jaw which reappeared in three daughters. He also noticed the case of a gentleman who had lost the middle finger of his right hand. His son had not this defect; but he had two children, in both of whom the corresponding finger was absent.

Dr. Ogle remarks "that among the Chaonia-Berbers in the Aural mountains, the absence of the lobule of the ear, which also occurs among the Cajots, in Spain, has doubtless become general from accidentally arisen peculiarity." In *Nature* for Dec. 29, 1870, Professor Wetherill gives some information which he had received,

when visiting the Sioux Indians, who were dwelling at the mouth of the Yellow Medicine River, in Minnesota. "It is customary," he says, "for the squaws of their tribes to have tattooed upon the prominence of their cheek-bones small discs, of from one-eighth to one-fourth of an inch in diameter. I was informed by a physician, who had passed much of his time with these tribes, that sometimes a child was born with these marks." This statement was corroborated by the U. S. Government Indian Agent. In Mr. L. W. Dillwyn's book, "Materials for a Fauna and Flora of Swansea and the Neighbourhood" (a book privately printed, and, consequently, little known), there occurs the following passage: "In 1804 there was in the Neath Valley a remarkable breed of a sort of sheep-dog, with nothing more than a flat depression, about half an inch broad, between the nostrils, and was said to have originated in a bitch which had her nose longitudinally cloven by some accident. The breed retained this deformity for several years, but I believe it is now extinct."

A well authenticated instance of a very extraordinary deformity is that of the "porcupine family." Edward Lambert, "the porcupine man," had his whole body, excepting the face, the palms of the hands, and the soles of the feet, covered with horny projections, which were periodically moulted. According to the "Philosophical Transactions" (No. 424), "it was not easy to think of any sort of skin or natural integument that exactly resembled it. Some compared it with the bark of a tree; others thought it looked like seal-skin; others like the skin of an elephant, or the skin about the legs of the rhinoceros; and some took it to be like a great wart, or number of warts, uniting and overspreading the whole body." Edward Lambert's six children all showed the same appearance as soon as they were six weeks old. The only survivor of these six transmitted the peculiarity to his sons. At least three generations were characterized by these excrescences; according to some accounts—five.

In connection with the transmission of skin peculiarities, there is recorded a case of a London musical composer who had webbed feet, and his father, grandfather, and great grandfather, were all web-footed. In the *Medical Mirror* for Dec., 1864, a case is given in which webbed fingers were hereditary through four successive generations. Mr. J. B. Thompson quotes a similar example in the *Edinburgh Medical Journal* for Dec., 1858. W. S. had three fingers which were united by skin, viz., the middle, ring, and little fingers of both hands. Although the mother had the same malformation, W. S. was the only one of seven children to whom it was transmitted. Her paternal uncle, however, had the same, and her paternal grandfather had the three smaller toes on each foot similarly united. This is one amongst several other cases, which are cited in order to prove that the father, or male progenitor, has the greatest share in transmitting hereditary skin peculiarities to the offspring.

In obedience to the same laws, if a negro marry a white woman, the children have woolly hair; if a European marry a negress, the children have straight hair. Dr. Prichard says: "Children resemble, in feature and constitution, both parents, but, I think, more generally the father. In the breeding of horses and oxen, great importance is attached, by experienced propagators, to the male. In sheep, it is commonly observed that black rams beget black lambs. In the human species, also, the complexion chiefly follows that of the father; and I believe it to be a general fact that

the offspring of a *black father* and white mother are *much darker* than the progeny of a *white father* and a black mother." The subject, however, is somewhat complicated, and this observation by no means exhausts it.

Many interesting cases of transmitted albinism (or deficiency in colour) might be given, but the following are probably sufficient. The first we quote *verbatim* from the *Edin. Med. Journal* for Feb., 1859. "A. S., a miner, and his wife are aged thirty-nine, their birthdays being within twenty-six hours of each other. They are both tall, healthy, and of fine physical organization. The husband is very dark-skinned and black-haired; the wife fair-skinned, and with light sandy-coloured hair. The children are nine in number, and divided into two distinct varieties, viz.: four boys, dark-skinned and black-haired, like the father; three boys and one girl with the albino characteristics; and one girl, fair, but not an albino—the latter five resembling the mother. The skin of the four albinos is of a dull whitish hue, almost destitute of pigment; and the whole body is invested with white, scattered, delicate, and downy hair. The hair of their heads is white and silky." The further description, which refers to the redness of the pupil, pinkness of the iris, &c., is more or less true of every albino. It is plain that these abnormalities of the skin were due to the mother; but Mr. J. B. Thompson traced back the source of this albinism, and found that the maternal grandfather was an albino.

Mr. Henry Marshall says in the *Edin. Med. Journal* (Vol. 38): "I am informed that an albino male parent, who resides at —, in the north of England, has a numerous family of children, some of which are pure albinos, while the others have the natural pigment of the skin, hair, and eyes, and resemble the mother. There are several albino females in this gentleman's family." Another case is given by Dr. Devay in his work "*Du Danger des Mariages Consanguins*." He relates that two brothers married two sisters, who were their first cousins, and although no relative of any of the four was an albino, the seven children, who were the issue of these marriages, were complete albinos. The lack of pigment does not seem to be any great disadvantage. Three-fourths of the ferrets which are now used in England are albinos. They have red eyes and white hair, and are for all purposes quite as useful as those with brown hair.

A Siamese family were remarkable for having the body and face covered with long hair, and in addition to this they showed imperfections in the teeth—a correlation frequently noticed. These peculiarities lasted through three generations. A similar example of redundant hair is mentioned by Mr. Crawford in his work, entitled "*Embassy to the Court of Ava*." Reference is made to a man in the Burmese court whose body, except the hands and feet, was covered with long hair. On his shoulders and down his back it reached the length of five inches. He had a daughter, who even at birth had hair within her ears, and very soon her whole body was covered. By means of a bribe the king induced a man to marry her, and one of her children, a boy, had a beard and moustache when fourteen months old.

Some years ago, a woman, named Julia Pastrana, was exhibited in London. She not only had a fine beard, but her whole body was hairy. Her little boy appeared to have quite as much hair as his mother. While speaking about hair, we notice also a case which Darwin gives, and which he thinks is the more striking because it is such a trifling peculiarity. He says: "I knew an

Irish gentleman who, on the right side of his head, had a small white lock in the midst of his dark hair: he assured me that his grandmother had a similar lock on the same side, and his mother on the opposite side." Haslam, in his work "*On Madness*," mentions another trifling personal deformity which was inherited. "A toe-nail, particularly twisted," he says, "has been traced through three generations, on the same foot and toe."

A case is recorded of a patient in St. George's Hospital who had no patella—or knee-cap. It was elicited from him that neither his father nor grandfather had ever had patellæ. Dr. Whitehead says: "I am attending an infant who has the left side of the head much larger than the right. His brother, who died under my notice at the age of three years, had the same kind of disproportion of the head. . . . His paternal uncle, a man of singular propensities, has the same conformation."

OVERHEAD WIRES.—The educational action of circumstances has necessarily everything to do with the appreciation of danger and the development of a habit of caution. It is a natural consequence of our experience that we are always inclined to examine our surroundings and the ground on which we tread, for it is in connection with these that we may expect to find most of life's risks and troubles. How seldom do we look upwards unless it happen that some elemental disturbance forces us to respect our interests in that quarter. We are likely, however, to become ere long as careful of the state and contents of our upper atmosphere as of any part of our environment. The possible means of injury acting from above have certainly increased as a direct consequence of recent scientific discoveries. A dozen years ago one had, indeed, a potent, though very rarely effective, source of danger in the overhead telegraph wires of our large cities. Now there are in some towns not only this but two other kindred powers at work in the telephone and the electric lighting communications. The fact that these are not always for the public mere matters of convenience has been repeatedly demonstrated by such accidents as that which was lately reported from New York. In this instance a broken telephone wire, coming in contact with one charged with electricity for lighting purposes, became itself a conducting medium, and was wound in its fall round the fore-quarters of a passing horse, with of course, fatal consequences. It is also said that the driver, in his ignorant endeavours to free the animal, was barely prevented from handling the fatal wire. This and similar accidents which have occurred from time to time, while they counsel, on the other hand, the most perfect insulation of the conducting wires, must also give weight to an argument in favour of the partly adopted and most rational practice of carrying the wires underground instead of over the housetops, as is now too much the rule.—*Lancet*.

FOURTH EDITION.—NOW READY.

"A Book every Young Man should read."

A LECTURE TO YOUNG MEN on Purity of Life and the Preservation of Health, by A GRADUATE. Price ONE SHILLING, or post-free, 1s. 1d., from HENRY RENSHAW, Medical Publisher, 356, Strand, London, W.C.

A complete refutation of quackery of all kinds, and a safe and reliable guide, from the medical standpoint, to all young men. Every youth should read this pamphlet as a guide to the safe conduct of life in a moral and physical sense.

In this pamphlet not only are the doings of quacks fully exposed, but the now notorious bogus "electric belt" swindle is explained. Full directions for the treatment of Nervous Debility so-called, and allied ailments, are also given. Thousands of sufferers have welcomed this pamphlet as a veritable beacon-light to health and purity of life.

## Personal Health

"Be timely wise;  
With health all taste of pleasure flies."—*Gay*.

### THE NEW REVOLUTION IN DISEASE-TREATMENT.

WHEN one reviews the history of Europe as it was for over a thousand years, and compares it with that of our own time, there are two things which particularly strike the close observer. The first is that the population was so stationary, and the second that the death-rate was so high. The ease with which the necessities of life are obtained influences primarily the increase of a population, while generally unsanitary conditions produce an enormous proportion of deaths. When the sanitary conditions of London, and indeed of all England, in the 15th century, are taken into account, one marvels at the miseries human beings may and do suffer. The death-rate now is one-half what it was then, and is still twice as large as it should be. This is not due to improved methods of treatment, so much as to the advances of preventive medicine. The grandest functions of medical science lie in the direction of the prevention and elimination of disease. Nothing is so expensive, in every way, to a nation as sickness. The controlling, governing elements of a society should be held accountable for the rate of increase of the population, and also for the death-rate. The improvements in society, and the bettered conditions of great numbers of people, as compared with those of bygone times, are entirely due to science, and the prolific scientific achievements of our day certainly make the work of those in the middle ages seem dim and tame.

Of the recent advances we would single out one only—one not appreciated yet by the rank and file of the medical profession. We refer to the lessened doses the best medical men employ, as compared with the large quantities of drugs heretofore poured down people's gullets. We have seen, years ago, a patient given twenty grains of calomel. Now the intelligent practitioner will give one-sixth of a grain every thirty minutes, and with less than a grain produce the required effect. Aconite is a very powerful drug, and, however efficient it may be, one wonders at the enormous doses of it that some have ventured to give. The same is the case with many other medicines. It is now becoming a custom to give small divided doses, frequently repeated. The advantages of this can hardly be gainsaid, especially with drugs that often produce undesirable results. We shall have much to say on this subject in the future. What are greatly needed, at the present time, are modes of therapeutic procedure, that whatever else they may do will accomplish no harm. The days of heavy drugging are fast drawing to a close. Those people who require their physician to write a prescription for them and then have it compounded by a chemist are on the best, safest, and most economical lines.

In connection with this subject of diminished dosing, arises that of the importance of diet in health and disease. Improved invalid foods constitute no insignificant therapeutic improvement. Diabetic bread and viands made with soluble saccharin tabloids, milk peptonised with Fairchild's peptonising powders for infants, a pleasant form of cod oil like Kepler's for consumptives and those with coughs, scientific methods of making beef-tea, as with zymine, and the predigesting of gruels are all noteworthy, and belong to this, our own age. Dietetics, thanks to Fothergill, Brunton, and others, has advanced to the dignity of a science in itself.

## The Family Circle

"The child is father of the man."—*Wordsworth*.  
"In bringing up a child, think of its old age."—*Joubert*.

### EMOTIONS VERSUS HEALTH IN WOMEN.

By MARY T. BISSELL, M.D.

(Concluded.)

THE old meaning of the word emotion—*commotion*—is opposed to the best mental growth and health. In repose, in the quiet harmonious performance of its functions, the mind grows into vigorous maturity, and the constant unrest and commotion of nerve-elements, which accompany violent emotional disturbances, and repeated strain upon other than its reasoning faculties, cannot fail to disturb the quiet, natural evolution of its powers. Can this tendency in woman's training be shown to affect her bodily health? Physicians and metaphysicians answer, Yes!

The intimate relation which exists between the mind and the body is a matter of familiar knowledge to us all. The tear that starts from the eye when grief disturbs the mind, is a common instance of the effect which an intangible mental emotion has upon the physical basis of the lachrymal gland. The loss of consciousness and the heart-failure which may follow great mental shock, and the deleterious effect which mental anxiety may exercise upon digestion, are, unfortunately, matters of common experience. Even the poetical allusion to the hair which grows white in a single night has its basis on physiological fact. The miracles claimed by the faith-curers are in the same line of argument, for they indicate how far sedation of the mind may be an adjuvant to the cure of the body.

Says Maudsley: "It may be questioned whether there is a single act of nutrition which emotion may not affect, infecting it with feebleness, inspiring it with energy, and so aiding or hindering recovery from disease. It is certain that joy or hope exerts an animating effect upon the bodily life, quiet and equable when moderate, but when stronger, evinced in the brilliancy of the eye, in the quickened pulse, in an inclination to laugh and sing; grief, or other depressing passion has an opposite effect, relaxing the arteries, enfeebling the heart, making the eye dull, impeding digestion, and producing an inclination to sigh or weep." This exaggeration of the emotions, seen in many cases among women, may be considered a serious factor in inducing some of the most common diseases of the nervous system from which Americans, in particular are suffering.

In his treatise on the causes of these nervous diseases Dr. Ross, of London, says: "Psychical disturbances are a prolific source of disease of the nervous system, and it is probable that as civilization advances these causes will exercise a more and more predominant influence in the production of nervous disease. The depressing passions, such as fright, alarm, disgust, terror, and rage, have, no doubt, in all ages, exerted a deleterious influence on the nervous system; but in the present day the keen competition evoked by the struggle for existence in the higher departments of social life must subject the latest evolved portion of the nervous system to a strain so great, that those only possessing the strongest and best-balanced nervous system can escape unscathed." Of these nervous diseases, nervous exhaustion and hysteria were never more rife than to-day.

As regards the occurrence of hysteria, while it is fre-

# VAN HOUTEN'S COCOA

PURE] **BEST, & GOES FARTHEST.** [SOLUBLE

**MOST DELICIOUS.**—MADE INSTANTLY  
with boiling water.—**REFRESHING.**

*Being very strong & nutritious, THIS Cocoa is cheaper & more satisfactory than tea.*

**Invaluable** in Hospitals, on Board, in the Camp, Railway Stations, for Workmen (at home and to take to their work), &c., &c. Needs no boiling.—Milk not necessary.—Sugar at discretion.

*It is admirable, } BRITISH  
flavour is perfect, } MEDICAL — pure & unmixed, } LANCET.  
& so pure. } JOURNAL. } goes a long way.*

**ONCE TRIED, ALWAYS USED & RECOMMENDED.**

Sample tins free through your grocer or chemist.

## CHATTO & WINDUS'S CHEAP EDITIONS OF POPULAR NOVELS.

PICTURE COVERS, PRICE TWO SHILLINGS EACH.

By PERCY FITZGERALD.

Bella Donna  
Never Forgotten  
The Second Mrs. Tillotson

Polly  
Seventy-five Brooke-street  
The Lady of Brantome

By R. E. FRANCILLON.

Olympia  
Queen Cophetua

One by One  
A Real Queen

By CHARLES GIBBON.

Robin Gray  
For Lack of Gold  
What will the World say?  
In Honour Bound  
The Dead Heart  
In Love and War  
For the King

Queen of the Meadow  
In Pastures Green  
The Flower of the Forest  
A Heart's Problem  
The Braes of Yarrow  
Of High Degree  
Fancy Free

By BESANT and RICE.

Ready-Money Mortiboy  
With Harp and Crown  
This Son of Vulcan  
My Little Girl  
The Case of Mr. Lucraft  
The Golden Butterfly  
By Celia's Arbour  
The Monks of Thelema  
Twas in Trafalgar's Bay

The Seamy Side  
The Ten Years' Tenant  
The Chaplain of the Fleet  
All Sorts and Conditions of Men  
The Captains' Room  
All in a Garden Fair  
Dorothy Forster  
Uncle Jack

By BRET HARTE.

An Heiress of Red Dog  
The Luck of Roaring Camp  
Californian Stories

Flip  
Gabriel Conroy  
Maruja

By WILKIE COLLINS.

Antonina  
Basil  
Hide and Seek  
The Dead Secret  
Queen of Hearts  
My Miscellanies  
The Woman in White  
The Moonstone  
Man and Wife  
Poor Miss Finch  
Miss or Mrs.?

The New Magdalen  
The Frozen Deep  
The Law and the Lady  
The Two Destinies  
The Haunted Hotel  
The Fallen Leaves  
Jezebel's Daughter  
The Black Robe  
"I say No"  
Heart and Science

By JULIAN HAWTHORNE.

Garth  
Ellice Quintin  
Sebastian Strome  
Dust

Prince Saroni's Wife  
Fortune's Fool  
Beatrice Randolph

By E. LYNN LINTON.

Patricia Kemball  
Leam Dundas  
The World Well Lost  
Under Which Lord?

With a Silken Thread  
The Rebel of the Family  
"My Love!"  
Ione

By THOMAS HARDY.

Under the Greenwood Tree.

By JUSTIN MCCARTHY.

Dear Lady Disdain  
The Waterdale Neighbours  
My Enemy's Daughter  
A Fair Saxon  
Linley Rochford

Miss Misanthrope  
Donna Quixote  
The Comet of a Season  
Maid of Athens

By D. CHRISTIE MURRAY.

A Life's Atonement  
A Model Father  
Joseph's Coat  
Coals of Fire  
By the Gate of the Sea

Val Strange  
Hearts  
The Way of the World  
A Bit of Human Nature

By Mrs. OLIPHANT.

Whiteladies.

By CHARLES READE.

It is never Too Late to Mend  
Hard Cash  
Peck Woffington  
Christie Johnstone  
Griffith Gaunt  
Put Yourself in His Place  
The Double Marriage  
Love Me Little, Love Me Long  
Foul Play  
The Cloister and the Hearth

The Course of True Love  
Autobiography of a Thief  
A Terrible Temptation  
The Wandering Heir  
A Simpleton  
A Woman-Hater  
Singleheart and Doubleface  
Good Stories  
The Jilt  
Readiana

*The above is a Selection only. The Complete List of nearly FOUR HUNDRED NOVELS will be sent free upon application.*

LONDON: CHATTO & WINDUS, PICCADILLY, W.

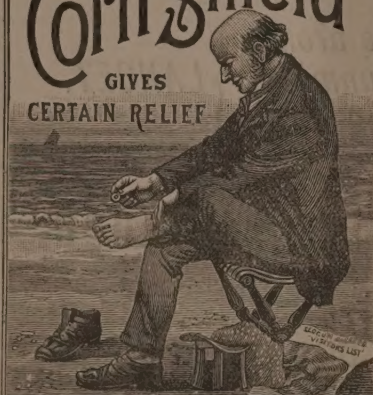
## A CLEAR COMPLEXION.

Pimples, Black Specks, Sunburn, Freckles, and unsightly blotches on the Face Neck, Arms, and Hands, can be instantly removed by using

MRS. JAMES'S  
HERBAL OINTMENT.

Made from Herbs only, and warranted harmless. It imparts such a lovely clearness to the skin that astonishes everyone. Of all Chemists is 1½d. A box (with directions) sent free from observation, post free on receipt of 15 stamps to

Mrs. James, 268, Caledonian-rd., Lond., N.

ALLCOCK'S  
Corn Shield  
GIVES  
CERTAIN RELIEF

THE BEST CORN PLASTER MADE

THOMSON'S  
COD LIVER OIL CREAM

DELICIOUS,  
EASILY DIGESTED, AND HIGHLY NUTRITIOUS.

From HEALTH, 30th Nov., 1883.—"For children and invalids generally this preparation must be highly commended."

Bottles, 2s. 3d., 4s., and 7s. 6d.; by post, 3d. extra.

Prepared only by B. THOMSON, Chemist,  
40, DUBLIN-STREET, EDINBURGH.

(late with SQUIRE, Chemist to the Queen).  
London Agents—J. SANGER & SONS, 489, Oxford-st.

IF BORWICK'S BAKING POWDER is not the best in the world, why has it gained five gold medals? Any housewife will answer: Because it makes the best bread, the lightest pastry, and most tempting cakes and puddings. Tell your grocer you must have Borwick's.

John Heath's  
PENS

Turned-up Point, Bronzed  
Fine or Medium, as 6d.  
Golden Coated, 3s. 6d.  
Per Case

JOHN HEATH'S  
TELEPHONE PEN  
0278-F  
Speak for Them  
Registers  
Or in 6d. and 1/- Boxes. All Stationers. Sample  
Box (24 kinds) 7 stamps. BIRMINGHAM.

## A WONDERFUL MEDICINE.

## BEECHAM'S PILLS



Nervous and Trembling Sensations, &c. The first dose will give relief in twenty minutes.

Every sufferer is earnestly invited to try one box of these Pills and they will be acknowledged to be

## WORTH A GUINEA A BOX.

For females of all ages these Pills are invaluable, as a few doses of them carry off all humours, and bring about all that is required. No female should be without them. There is no medicine to be found equal to Beecham's Pills for removing any obstruction or irregularity of the system. If taken according to the directions given with each box they will soon restore females of all ages to sound and robust health. This has been proved by thousands who have tried them, and found the benefits which are ensured by their use.

For a Weak Stomach, Impaired Digestion, and all Disorders of the Liver, they act like magic, and a few doses will be found to work wonders on the most important organs in the human machine. They strengthen the whole muscular system, restore the long lost complexion, bring back the keen edge of appetite, and arouse into action with the rosebud of health the whole physical energy of the human frame. These are FACTS testified continually by members of all classes of society; and one of the best guarantees to the Nervous and Debilitated is, BEECHAM'S PILLS have the Largest Sale of any Patent Medicine in the world.

Prepared only and Sold Wholesale and Retail by the proprietor, THOMAS BEECHAM, St. Helens, Lancashire, in boxes at 1s. 1½d. and 2s. 9d. each.

Sold by all Druggists and Patent Medicine Dealers everywhere.

N.B.—Full directions are given with each box.



TO PRESERVE THE HAIR FROM DECAY, USE

## "CLEOPATRA,"

## THE HYGIENIC HAIR OIL.

As recommended by the Medical Profession. Will keep in all Climates. Price 2s. per bottle.

FOR PARTICULARS APPLY TO THE  
FRENCH HYGIENIC SOCIETY,  
56, CONDUIT-STREET, LONDON, W.

ESTABLISHED 1825.

## NEAVE'S FOOD

FOR  
INFANTS,  
INVALIDS,  
AND  
THE AGED.

BEST AND CHEAPEST.

## FREEDOM AT LAST

From  
Corsets



or Sus-  
penders.

THE JUBILEE PATENT  
EPAULET BRACE

Draws the Shoulders backward instead of forward, leaving the Sides free, and enlarging the Bust. It therefore improves the Digestion, Health, and Figure. It supports also the lower garments by running the belt through latches on the waistband of Trousers, or looping Petticoats to studs on the belt.

"No Brace can be made more agreeable and effective."

POST FREE in U. K. by sending P.O.O. to  
MACKINTOSH & CO., BANK-STREET,  
SINCLAIRTOWN, KIRKCALDY.  
For Gentlemen, 5/-; Ladies, 4/6; Children, 3/6.  
Sanitary Lining, 1/6 extra.

TOWLE'S  
Pennyroyal & Steel Pills

FOR FEMALES

Quickly correct all irregularities and relieve the distressing symptoms so prevalent with the sex. Boxes, 1s. 1½d. and 2s. 9d., of all Chemists. Sent anywhere for 15 or 34 stamps, by

THE LINCOLN & MIDLAND COUNTIES  
DRUG CO., LINCOLN.

BEWARE OF IMITATIONS.

quently found among those belonging to what we call the lower classes of society, it is more frequently manifested among the more highly cultivated. A French author who, indeed, speaks for his own country only, states that one out of four of all females are decidedly affected with hysteria, and that one half present an undue impressionability which differs very little from it. Although these statistics are too high for America, they are significant as being possible anywhere, and not the less so as coming from a land where, if a woman is anything, she is emotional.

Among the frequent causes of hysteria, all writers mention the depressing passions, such as fear, anxiety, jealousy and remorse. One says: "The chief mental characteristic of hysterical patients is an excessive emotional excitability unchecked by voluntary exertion." And again: "This excessive emotional activity necessarily induces exhaustion." The treatment of this affection recognizes, first and last, the influence of mind over body. We find that moral suasion, the employment of the individual in directions without herself, the cultivation of an intellectual purpose, of an objective quality of mind, are remedies that rank with the nervines and antispasmodics in the treatment of this disorder.

As regards nervous exhaustion, we find that affection is almost entirely confined to the more highly civilized portions of the community—indeed, is a disease of civilization. Among the causes of nervous exhaustion this same truth is manifest—that excessive demands upon the individual exciting the complex emotions of anxiety, worry, are largely responsible for inducing this affection. We believe, indeed, that hard work, unaccompanied by emotional excitement, seldom injures either man or woman. It is the man who, in addition to close application to work, is harrassed by fears of poverty, of loss of position, of anxieties for himself or his family, and the woman who bears the burden of domestic cares, of private griefs, or sustains the strain of a complex social system, who suffers from nervous exhaustion, not the hard-working mechanic, or the unemotional washer-woman. The experience of every school-girl testifies that mental anxiety produces a degree of physical exhaustion out of all proportion to the muscular work effected. The agitations of school politics, the over-emotional character often infused into school-girl friendships, the fears of failure and kindred commotions result in more physical weariness than hours of calm, steady work in the laboratory or in the class-room.

A college graduate confesses that one of the most exhaustive experiences of her college life was a morning spent in absolute physical inactivity in a student's meeting, but in a state of mental commotion impossible to describe, over an absorbing issue in college politics. "After four hours of that experience," she said, "I was fit for bed, and for nothing else." It requires no great ingenuity to suggest that this tendency in the training of woman, which affects her mental and physical health, may be met by remedies addressed to body and mind alike. The education which shall discipline, not eradicate, the emotional susceptibility of women must begin where the gentility of Dr. Holmes's ideal gentleman began—with our great-grandmothers.

Heredity may not be able to shoulder all of the sins of mankind, but, at least, it must bear its share. The coming woman must not only be well-born, she must be bred in more hygienic methods. She must not only possess inherited vigour, she must also be educated nearer to Nature. The genuine child of Nature is not a morbidly emotional child. The girl who lives in the open

air, who knows every bird and flower and brook in the neighbourhood, has neither time nor inclination to spend in reading the sentimental histories of departed child-saints, and takes small delight in morbid conversation.

Out-of-door life has never been made popular or interesting for little girls, as it always has been for boys. Girls will voluntarily seek fresh air and sunshine if they appreciate the delightful occupations as well as the *fun* to be found in it. They are quite right in "hating to go out because there is nothing to do." Open wide to them the fascinating book of Nature; let them read the story of bird-life and animal life, and find their first hints of the wonders of plants and rocks by sunlight, and at first-hand, not from a printed page in unventilated libraries. Then, when out-of-door life and out-of-door sports have been made as attractive and popular for girls as for boys, and when they have accepted the creed that a nobly-developed and active body is as much their birthright and glory as it has always been the glory of their brothers, we shall find we have gone a long way toward reducing exaggerated emotions in women. And if our first antidote for this condition lies in physical activity, and in the cultivation of a sound body, the second antidote will be found in the provision of constant, congenial employment for the mind.

When a young woman went to Henry Ward Beecher to ask him to prescribe for her disappointed affections, he promptly advised her to begin the study of the higher mathematics! There is no doubt but that among the less apparent, but no less real, causes of undue emotional development among women we may count the lack of congenial and effective work. There is nothing sanitary in intellectual idleness. Physiology forbids that the inactive brain should be a healthy one. The overworked individual may suffer from undue strain, but the mind which is denied congenial employment suffers even a worse penalty in the disability of its best powers, and the waste of purposeless energy.

Women who are receiving the so-called higher education, find in its discipline and opportunity the best remedy for any tendency to excessive emotional disturbance. "The worst enemy of the emotions is the intellect." There is no stronger argument for opening to women new avenues for the acquisition of knowledge than these facts of her constitution offer, justified as the experiment has been by those who have found life a better and a broader thing to them because of these opportunities.

Undoubtedly the actual erudition that is gained in a collegiate training for women could be obtained under other conditions than in the four years of college life. But the inestimable value of our women's colleges lies not so much in their opportunities for actual learning as in the atmosphere they offer. To live for four years under a *régime* where mental and physical energy are carefully utilized and disciplined, and where the tendency is toward the development of an objective type of mind and the cultivation of a broad intellectual outlook—these are incalculable benefits to woman.

Give to our children, our growing girls and our young women, occupation which, according to their age and capacity, shall develop every faculty of the mind and afford genuine scope for usefulness, and we shall find that the energy which might have been dissipated in unproductive emotions, has been diverted into channels of effective work, and conserved for high and healthful ends.—*Popular Science Monthly*.

## Popular Science Papers

"Blessings on Science! When the Earth seemed old,  
When Faith grew dotting, and our reason cold,  
'Twas she discovered that the world was young,  
And taught a language to its lisping tongue."

—Charles Mackay.

### ON THE POWER OF MUSIC AND ITS PLACE IN MEDICINE.\*

By GUY C. ROTHERY.

SECOND PAPER.

MANY people have shown themselves far from satisfied by the elaborate explanations and experiments of the physicists. Accepting their theories to a large extent, they declare that the undulatory theory is by no means sufficient to explain all the phenomena of music and its influence on animated nature. Dr. Richard Brocklesby, writing in the year 1749, says: "I must beg leave to dissent from that opinion which ascribes its operation (viz., that of music on body and mind) to a mechanical undulatory pulsation of the air on the extremity of the nerves."

Something more than this was required to satisfy these ardent enquirers. Perhaps the most complete theory set up in opposition to the purely mechanical doctrine was that put forth by Dr. Hector Chomet, of Paris. He supposes space to be charged with an "imponderable fluid," which he names "sound" or "tone ether" and conjectures to exist everywhere, like the ether of light and heat theory; to be ever present, active or dormant, like electricity. He then asserts that living beings, and, to a certain limited extent, even inanimate objects, are capable of undergoing the influence of this "imponderable tone ether"; that this sympathy or antipathy to the "ether" is constantly manifested, and often produces most curious effects. Again, this "imponderable fluid" is capable of combining, modifying, and changing its character in many ways, just as we see in the case of light, heat, and electricity. Now this combination of sound, under given circumstances, has been called music; and when we produce this said music, by mechanical means, we make use of the ever present but impalpable volume of sound, we put ourselves in immediate communication with a new force, a force which, for good or evil, has vast influence over the animal economy. Thus far Dr. Chomet. But, although this theory may seem somewhat startling, it would undoubtedly greatly help us to explain many of the mysterious phenomena of music.

If Dr. Chomet is right, may we not safely assume that this "tone ether" permeates the whole animal economy, is present in every tissue, finding its way into the lungs, and from thence conveyed by the blood to the remotest ramifications of the system? We might then be likened to a reservoir charged with "tone ether," the tympanum of the ear acting as a medium of communication between the charged cavity and the outside activities. The learned Paris physician has much to say in support of this theory, but we cannot follow him very closely in his long and careful *exposé*. Among some of the curious effects of music which he calls in support is one with which we are all more or less familiar, that is, prolonged and distant echoes, and its modified form or time-echo in our own minds; that is to say, the capacity of our brains to retain, unconsciously, simple or elaborate tunes, which recur to us unexpectedly and apparently without rhyme or reason. He also says, "Le son pénètre tous les corps,

et si l'on fait de la musique dans un appartement, dans une salle de spectacle ou dans une église, il n'est pas rare d'entendre les meubles, les loges, ou les autels résonner à l'unisson des instruments."

Probably such a theory as this will be held unscientific, but, as we have already said, it would help us to solve many a mystery. M. de Laprade, of the Académie Française, says, "Il est incontestable que la musique nous emporte dans le sentiment de l'infini et la contemplation de l'invisible, à des hauteurs où atteint à peine l'esprit pénétré par les plus sublimes spectacles de la création. Nous cessons de sentir notre corps; la terre disparaît à nos yeux; notre pensée flotte dans l'incorrupible éther comme une essence immatérielle: notre âme n'a plus de limites, nos petites passions s'évanouissent, notre personnalité s'abdicque, elle est sur le point de se dissoudre dans la vie universelle. C'est la véritable extase." An ecstasy? Well, yes, some people may feel inclined to say; but may it not mean more, far more than this? May we not have here a glimpse of that higher state of being which we must suppose will be our lot when our soul gets free from its terrestrial mud-hovel? May we not while here on our earthly pilgrimage be devoid of one sense, a sense which would enable us to float above the terrific wonder of space, time, and eternity? This sense, they might fairly argue, may be a musical one, for what we know to the contrary, seeing that music is so powerfully influential.

Possibly when our immortal spirits are released from mortal flesh we may be put in complete harmony with the ever-present, intangible, but all-powerful "tone-ether." Such harmony is imperfect during our present condition, though under given circumstances we may feel the effects of this wonderful music. All this, and far more, has been put forward again and again, by sincere and ardent students holding the most diverse opinions. "All knowledge takes its rise in the senses. Our ideas can never go much beyond our sensations. The addition of a new sense, if such a thing were possible, would enrich our minds by a new kind of knowledge respecting the world." With us, it is true, music is far more carnal, more sensual than ethereal and spiritual; but this too, it might be said, may only be another manifestation of the mysterious amalgamation of soul and body under which we labour. M. de Laprade says again, "La musique est le moins humain de tous les arts. Elle est divine si vous voulez, mais divine comme la nature, comme tout ce qui est en dehors de l'homme." But we will not ask our readers to accompany us any further in this speculative, Beethovenish

Highest Award, Only Gold Medal, London, 1884.

## GRANT'S SCOTCH OAT-FLOUR.

ESTABLISHED 1813.

CRAIG MILLS, DUNDEE.

"11, Mount Vernon-road, Liverpool.

"Being very much interested in the 'Food Question,' I buy all new things. Some are born only to die, others live out a useful life, and to this latter class Grant's Scotch Oat-Flour belongs. It is an admirable preparation of oats, giving all the nourishment without the roughness of oatmeal. Porridge, Puddings, Blanc-mange, and Biscuits are excellent made from it. I can, therefore, confidently recommend it to the healthy, because it will keep them in health; to the delicate invalid, because it will restore health; and to children, because it will lay the foundation of a sound and healthy life. To vegetarians it is invaluable. The case with which it is prepared is by no means to be forgotten.

"ISABELLA THWAITES."

\* Rights of reproduction reserved.

flight, more especially as those who do not hold with good old Montesquieu when he says, "Music is the only one of all the arts which does not corrupt the mind," may opine that the delightful art is apt to—

"Change in a trice  
From the lilies and languors of virtue  
To the roses and raptures of vice."

Mr. Grant Allen deals at some length with the psychological aspect of music. "The great mass of pleasurable feelings aroused by music is undoubtedly due to its power of suggesting and stimulating the various complex emotions. It is a well-known fact that mere colloocations of sound, without words or other interpretations, will rouse martial enthusiasm, quicken religious feeling, or bring tears to the eyes of thousands." This he attributes to natural laws, for "the high and low tone respectively are the natural expressions of different passing emotions, both in man and other animals." He then very elaborately illustrates this by showing what are the most natural modes of expression, by exclamation and intonation, of man and the lower animals when under the stress of strong emotions. All which, looked at narrowly, goes far to demonstrate that music is founded upon, or is the cultivated expression of, natural physiological laws. Evidence which the musical pathologist should make a note of.

Towards the latter end of last century a well-known practitioner made a series of very pretty experiments. His subject was "a child not two years old, born of musical parents, who was one day remarkable for mirth and good humour upon hearing some sprightly airs of music; this gave occasion to the father and Mr. Stanley to try the effects of different measures, when they had raised the infant's spirits very high by these means. But as the chromatick and graver strains began, the child grew melancholy and sad, which temper was removed as soon as pleasanter music was played. Thus, as I am informed, they could, solely by this art, raise and allay joy and grief by turns in the infant's mind."

THE most recent measurements of skeletons indicate that the ancients were not superior to the moderns in stature, but may have been inferior. The average heights of two lots of Romano-British skeletons ranged from four feet ten inches for women to five feet two inches for the larger men; and the average height of twenty-five mummies in the British Museum is fifty-five inches for females and sixty-one inches for males.

SELL'S DIRECTORY OF THE WORLD'S PRESS.—The issue of this remarkable work (published by Mr. Sell, of the Advertising Agency, 167, Fleet-street, London, E.C.) for 1888 appears as a bulky volume, which forms a complete guide and directory to the various magazines, newspapers, and periodicals of the world. In addition to the valuable and detailed information respecting newspapers, their localities, rates for advertisements, and other matter important to advertisers, the volume contains interesting articles on the law of libel as related to journalism, on trade journalism, on "Some Newspaper Men," &c.; while portraits of notable editors and literary celebrities also adorn its pages. An immense amount of labour, and a very large expense must have been expended and incurred in the production of this work, containing, as it does, nearly 1400 pages. The book must possess a distinct and individualized interest for editors, publishers, and advertisers alike, and we congratulate Mr. Sell on the gratifying result of his labours in the way of producing a model directory to that world's civilizer—the Press.

## Public Health

"Health is the first Wealth."—Emerson.

### THE MEAT FOOD-SUPPLY OF THE NATION AND ITS FUTURE.

BY AZEL AMES, JR., M.D.

SECOND PAPER.

It is evident from the foregoing statements, the practical accuracy of which cannot be seriously questioned, that the second important staple in our food-supply and the principal one of our export trade—meat—is rapidly diminishing from three natural causes, viz. :—

The enormous increase of population and its consumption;

The diminishing grazing area; and

The increased cost of production.

But aside from these natural influences, two that are distinctly abnormal additionally threaten and depress the industries which produce flesh-food.

The first of these is disease, which, of several types, and of varying powers of communicability and destruction, has wrought sad havoc in the past five years upon the cattle and swine in the country. The second consists in old and new enactments of Congress and state legislatures, and the unwise and unjust administration of these laws.

To these untoward influences may be added another which is always potent for good or ill, and in this connection has been productive of no little harm, viz., the unfriendly attitude of the press, which, without malice, but from lack of information as to the real value and dignity of the interests it criticized, forgetting the deep concern the whole people must have in all that relates to the food-supply, have hurt oftentimes where they should have helped, have misrepresented because they did not know, and failed to aid where every ounce of assistance was demanded for the common good.

Wastefulness, too, has made, and still makes, its outrageous deductions in astonishing totals from the dressed product of the shambles. European economies in the use of food are yet unknown to our native, and to a part of our foreign, population. The inevitable results are the loss of an enormous percentage of excellent flesh-food that has cost money to produce, prepare, and transport, and gives no equal return, and a considerable increase of price upon all that which is consumed. Unfortunately, as a nation, we make little use of soups, stews, or *ragouts*, those excellent forms of concentrated food which nourish so well, cost so little, and utilize so admirably the portions we now so wickedly waste.

I have said that the first of the purely abnormal influences which threaten and depress our animal food-supply is disease in its varying forms. Chief in the list stands pleuro-pneumonia, which, purely exotic in its character, has in its outbreaks of the past five years inflicted a direct loss upon the country of between 20,000,000 dols. and 30,000,000 dols.; has taken 10 dols. per head from the price of every steer shipped abroad as now slaughtered on the docks of his port of entry; has deprived the land of a large amount of valuable food, and if it shall ever reach the western ranges, must inflict incomputable damage upon the cattle industry and our food-supply, perhaps repeating its history in Southern Africa and Australia, where its march only stopped with the utter extinction of the herds.

For four years the great cattle industry of the nation, as represented in its consolidated association, has made vigorous and steadfast war upon the disease, first setting up, with the help of this association, as an instrumentality, the bureau of animal industry, which, with the enlarged powers and means secured for it from the last Congress, has been able to accomplish most gratifying work. Those of varying interests and large stakes in the cattle business have, however, of late years, urged the establishment of a commission, to be named by the President of the United States, upon whom Congress could, and would, confer degrees of power they refuse to vest in a department bureau, and which would not only have the eradication and prevention of disease as its sole duty, but would give representation to the practical stock-grower, the middle man, and the scientist alike.

There has been a difficulty in harmonizing the several views held, and a consequent loss of results as compared with what should have been; but it is no small pleasure to be able to state that at the convention of stock-growers under the auspices of the consolidated association of the United States, lately held at Kansas City, all factions united in complete harmony upon the support before Congress at its approaching session of the so-called "Miller Bill," providing for a commission, so amended as to make the Commissioner of Agriculture *ex officio* a member, and its chairman.

This is no small cause for congratulation among sanitarians and state boards of health, as well as stock-growers, as it no doubt practically ensures the speedy enactment of a law which creates an adequate and special power to deal with disease, able to take the field and prosecute the work all along the line at once, and leaves those who have been overburdened with its administrative work to the freer discharge of those scientific and other duties which are of such infinite value. Inasmuch as the eradication and prevention of disease rest upon a purely scientific basis, *ab initio*, the features of the bill which make ample provision for scientific experts—than whom none has done better service than the present able chief of the bureau of animal industry, who is unaffected thereby—will be appreciated by all sanitarians.

As indication of the conviction held by the great majority of those who have large investments in stock-raising, that the further present introduction of the disease should be effectually stopped, it may not be amiss to mention that the Kansas City Convention voted, almost unanimously, to urge upon the secretary of the treasury the total prohibition of importation of cattle for the present.

The second of the abnormal influences I have named as actively operating to depress and injure the producer of meat, resides in unwise laws and their still more unwise administration, state and national. That the country may have its meat-supply abundant and hence cheap, every facility for raising it must be afforded and the cost of its production be kept at the minimum.

The Commissioner of Agriculture has well said: "It is only the new region that has so recently been developed, west of the Mississippi, that has enabled the increase of our cattle to keep pace with the population. In the older settled states the agricultural class has not held its own in its relation to the other classes of our population; farms have been divided and sub-divided, and cattle-raising, and particularly beef-production, has given way to grain-raising and to fruit and truck-farming." It is plain that, by so much as the cheaper and prolific methods of the cattle-grower of the range are hampered and rendered expensive, under the operation of needless

and unwise law, the more difficult to obtain and the higher-priced will be the meat-supply of the consumer.

Whoever has crossed the Continent or been familiar with the great arid wastes and their contiguous mountain regions, knows how utterly worthless for any purpose but that of an open grazing country this part of the public domain is. The home of the buffalo and elk should become the habitat of the grazing steer; yet to-day the restrictive policy of the general land office, in opposition to the broad and liberal traditional policy of the Government since its foundation, which has built up a nation, as it were, in a day, withholds these lands from the only use to which Nature had adapted them, or man been able to apply them, in behalf of the imaginary settler who will never come.

The hand of Government, which should be put forth to foster and protect all the interests of production, itself has overturned an industry, which, as the distinguished officer in charge of its agricultural department says, "could alone give meat in adequate supply and at low prices to the people." The long series of disasters which have crippled and well-nigh paralyzed this great industry were precipitated by the uncalled-for and unwise action of the administration itself, and the intelligent men of all political parties who know the facts, deprecate and condemn this action as short-sighted and detrimental to the nation in the highest degree.

**THE DOCTOR—A PROSE POEM.**—The doctor is a useful man, Constructed on a noble plan; He's sometimes fat and sometimes lean, And sometimes just half way between, But none confers more blessings than The doctor. The doctor goes and lingers where Men's moanings fright the fetid air; Where'er he can he gives relief To sickness, and as well to grief. Ah, ill could we poor mortals spare The doctor. He may some stately palace own, All silk inside and outside stone; But still in counting human woes, Like some base-burner stove he goes, And never sleeps—so far as known—The doctor. We may not know him when this shell Of clay befits the spirit well; But when the spirit doth protest Against the clay that both invest, Our grief in confidence we tell The doctor. The doctor is a generous man, But people cheat him when they can; They have their health restored on trust, And pay him something when they must, And swear no bill is bigger than The doctor's.

**PRESERVATION OF MEAT BY SUGAR.**—It results from a special report made to the French Minister of Agriculture that sugar is an excellent agent for preserving meat, and possesses some advantages over salt. In fact, salt absorbs a portion of the nutritive substances and of the flavour of meat. When an analysis is made of a solution of the salt dissolved by water contained in meat, we find albuminoid bodies, extractive substances, potassa, and phosphoric acid. Salt deprives meat of these substances so much the more readily in proportion as it enters the tissues more deeply or acts for a longer time. It then results that the meat, when taken from the saline solution, has lost nutritive elements of genuine importance. Powdered sugar, on the contrary, being less soluble, produces less liquid. It forms around the meat a solid crust, which removes very little water from it and does not alter its taste. Thus preserved, it suffices to immerse the meat in water before using it. Although this treatment costs a little more than preservation by salt, account must be taken of the final result and of the loss prevented, which offsets the difference in cost between the two preservative agents. We think that navigators might profit by this.

## ONE BOX OF CLARKE'S B4I PILLS

IS WARRANTED TO CURE

All ailments of the Urinary Organs (acquired or constitutional), Gravel, and Pains in the Back.

GUARANTEED FREE FROM MERCURY.

Sold in Boxes, 4s. 6d. each, by all Chemists and Patent Medicine Vendors throughout the World; or sent to any address for sixty stamps by the Makers

**THE LINCOLN AND MIDLAND COUNTIES  
DRUG COMPANY, LINCOLN.**

Wholesale Agents: **BARCLAY & SONS, London**  
and all the Wholesale Houses.

Indigestion, Constipation.

NO DRUGS. NATURAL REMEDY.

### DAHL'S DYSPEPSIA CAKES.

Recommended by several Eminent Medical Men.

Of all Chemists. Sample Box 2s. 6d. Post Free.

**DAHL'S AGENCY, 41, EASTCHEAP LONDON.**

SEVENTEEN GOLD, SILVER, & BRONZE MEDALS.

**WM. WOOLLAMS & CO.,**

ORIGINAL MAKERS OF GUARANTEED

## NON-ARSENICAL WALL PAPERS.

TO BE OBTAINED OF ALL DECORATORS.

Manufactory and Sole Address:

**110, HIGH STREET**

(Near Manchester-square),

**LONDON, W.**



NOTE TRADE MARK.

## General Nursing Institute,

**5 & 4, HENRIETTA-STREET,  
COVENT GARDEN, LONDON, W.C.**

Established 1862. Solely under Medical Direction.

HOSPITAL TRAINED NURSES for every description of disease—MEDICAL, SURGICAL, MENTAL, and MIDWIFERY—can be obtained at this Institute on application to the Secretary or Lady Superintendent at a moment's notice, being resident in the Home.

MALE ATTENDANTS and NURSES specially for FEVER cases.

Telegraphic Address, "Nursing Institute, London."

## TOOTH - ACHE CURED INSTANTLY BY BUNTER'S NERVINE

Prevents Decay. Saves Extraction. Sleepless Nights Prevented. Neuralgic Head-aches and all Nerve Pains removed by Bunter's Nervine.

All Chemists, 1s. 1½d.

## BUNTER'S DENTINE

Is the most Simple & Durable Stopping for Decayed Teeth.

One can easily prepare and place it in the cavity of the Tooth in a soft state, and in a few hours it becomes a perfectly hard and white Enamel, forming as it were a part of the original substance of the Tooth.

All Chemists, 1s. 6d.

## HARROGATE. IMPERIAL HYDROPATHIC.

A HYGIENIC HOME FOR VISITORS AND INVALIDS.

And especially for the treatment of all suitable complaints by

**MEDICAL ELECTRICITY.**  
TERMS MODERATE.

Prospectus Free, of  
**J. R. TUNMER, M.R.C.S.E., &c., &c.,**  
Resident Medical Superintendent.

2nd Edition. 120 pp., illustrated, stiff boards, 2s.; cloth boards, 2s. 6d. Postage, 3d.

**ELECTRICITY IN DISEASE; How to Use it and What it will Accomplish.** London: E. W. ALLEN, Ave Maria-lane, E.C.; or of the Author, J. R. TUNMER, M.R.C.S.E., &c., Resident Medical Superintendent, Imperial Hydropathic, Harrogate.

## ADVERTISEMENTS IN "HEALTH."

TARIFF PER INSERTION.

|                     |        |
|---------------------|--------|
| Whole Page.....     | £5 5 0 |
| Half Page.....      | 2 12 6 |
| Quarter Page.....   | 1 6 6  |
| Eighth of Page..... | 0 13 6 |

Smaller Spaces pro rata.

OFFICE:

2, PATERNOSTER-SQUARE, LONDON, E.C.

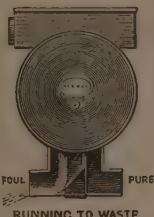
## WOOLDRIDGE'S TINCTURE

FOR

## GOUT, RHEUMATISM AND NEURALGIA.

OF ALL CHEMISTS.

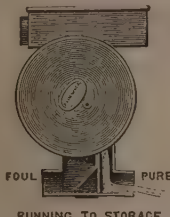
SILVER MEDAL, Health Exhibition, 1884, and Medal of Sanitary Institute, 1883.



## THE RAIN WATER SEPARATOR

Prevents the first portion of the rainfall passing into the storing tank. It catches and stores the water when the roof has been washed by the rain.

PRICE FROM £2 5s. to £6 5s.



**C. G. ROBERTS, Haslemere, Surrey.**

## INTERESTING ARTICLES.

SETS of the BACK NUMBERS of "HEALTH," containing completed Serial Articles on various important Health Topics, may be had on remitting cost of the numbers and stamps for postage.

The following subjects are treated:—

SHALL I SMOKE? In No. 231.

IS SNUFF-TAKING UNHEALTHY? In No. 218.

SOME HINTS FOR THE CURE OF FATNESS. In Nos. 213, 225.

PALPITATION AND ITS TREATMENT. In No. 216.

SCARLET FEVER. In Nos. 220, 230, 232.

DRESS AND UNDRRESS. In Nos. 216, 217.

NURSING. In Nos. 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219.

HATS AS A CAUSE OF BALDNESS. In No. 215.

HOUSE CONSTRUCTION IN RELATION TO HEALTH. In Nos. 208, 210,

212, 214, 216, 218, 220, 222, 224, 226, 228, 230, 232, 234.

HEALTHY HOLIDAYS. In Nos. 223, 224, 225, 226, 227, 229, 230.

SLEEP WALKING. In Nos. 72, 73, 74, 75, 77, 79, 80.

INFANTS. In Nos. 100, 101, 102, 103, 104, 105, 106, 107.

The price of numbers 1-156 has been increased to 4d. each, as, in consequence of the great demand for them, they are now nearly out of print. Nos. 157 to date may be had, price 2d. each.

PHYSICAL TRAINING FOR CHILDREN. In Nos. 94, 95, 96, 97, 98, 118, 119,

120, 121, 122, 123.

TRICYCLES, AND THEIR RELATION TO HEALTH. In Nos. 61, 63, 64,

65, 66, 68, 70, 71, 73, 74, 76, 78.

DIGESTION. In Nos. 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105.

WHAT TO DO WHEN FEVER INVADES THE HOUSE. In Nos. 1, 2, 3,

4, 5, 6, 7, 8, 9, 10, 11.

THE HAIR, SKIN, AND TEETH. In Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.

BURIED ALIVE. In Nos. 154, 155, 156, 157, 158, 159, 161, 163, 164.

HYDROPHOBIA: ITS NATURE, CAUSES, AND TREATMENT. In Nos. 20,

21, 23, 24, 25, 26.

CALISTHENICS. In Nos. 44, 45, 46, 47, 48, 49, 51, 52, 54, 59, 61, 62.

ECONOMICAL MEALS. In Nos. 48, 49, 50, 51, 52, 53, 54, 55, 56.

PUBLIC PARKS AND OPEN SPACES. In Nos. 57, 58, 60, 62, 64, 66, 71,

74, 76.

LONDON: A. P. WATT 2, PATERNOSTER-SQUARE, E.C.

# BAYLEY & Co.,

ESTABLISHED 1739,

Perfumers to the Royal Family and Foreign Courts,

SOLE MANUFACTURERS OF THE ORIGINAL

ESS. BOUQUET AND THE SPERMACETI SOAP.  
CELEBRATED

## PERFUMES.

Bouquet Victoria.  
Jockey Club.  
Army and Navy.  
Prince of Wales.  
Ceylon.  
Reveur.  
Marechale.  
Empress.  
Accession, one of their  
Especial Manufacture,  
&c., &c.

## SPERMACETI SHAVING TABLETS, AND CREAM.

### LAVENDER WATER.

THE supreme excellence of this Water is testified to by all who use it, and is specially recommended by the Medical Profession for sponging all irritated parts, especially in the case of Skin Eruptions; it is not only a Royal Perfume of the highest class, but gives instant relief from the most violent irritation.

### HINDOO MARKING INK.

BAYLEY & Co. having submitted this Ink to every known test, and the severest trials in domestic use, can fully assure the public that it far surpasses in quality every preparation of the kind within their knowledge, and that this Ink is really indelible. Price 1s. 6d., and in Cases, 2s.

## SOAPS.

Otto of Rose.  
Ess. Bouquet.  
Violet. Sandal.  
Almond.  
Brown Windsor.  
Glycerine.  
Honey.  
Cold Cream.  
Highly recommended  
for their pureness.

# BAYLEY'S REMEDIES.

## THE TRUE POMMADE DIVINE.

THE great usefulness of this excellent Remedy, the POMMADE DIVINE, is so well known to all who have ever applied it, that no Encomium is necessary, and to those who are yet unacquainted with its virtues, a trial in the following cases will be its best recommendation:—

It is good for all sorts of Pains, Swellings, and Bruises occasioned by Falls, or otherwise, and will prevent the many bad consequences of such Accidents.

For a Cancer before it is broke, and for all sorts of Sore Breasts, particularly in a Lying-In.

For Stiff Necks and for Swellings occasioned by the Evil.

For a Gangrene, melting a little in a wound, without using a tent.

For Pains in the Stomach, rubbed in before the fire.

If a little be well rubbed in for a few minutes on a Bruise or Pinch, it will prevent Blackness. Will also cure Scalds and Burns, applied directly; and Rheumatic and Gouty Pains fixed in any part.

N.B.—No woollen of any kind should be applied to the parts affected, nor any metal (except silver) touch the Pomme. It will retain its virtues many years, and is therefore very useful to all Travellers, particularly Gentlemen of the Army and Navy.

## HÆMORRHOIDS (or PILES).

As highly useful family medicines for that most distressing of complaints, Hemorrhoids (or Piles), Bayley's Remedies have long enjoyed a high reputation. These remedies consist of specially prepared Pymont Tablets for invalid use, and of a Pymont Liniment for outward application. The tablets are compounded on the principle of the famous Pymont waters, which have been so highly recommended in cases of liver complaints, to the presence of which piles are often due, as well as in cases of the latter ailment itself. The liniment is made on allied principles. From an examination of these tablets and of the liniment, we are able to assert that they contain nothing calculated to produce untoward effects in the most delicate constitution, while they are likely to prove most beneficial in mild and severe cases alike. The ease with which the remedy may be taken—the tablets being agreeable to taste, and being merely allowed to dissolve in the mouth—will recommend this preparation in the eyes of those especially who have run the gamut of the many drugs employed for the cure of hemorrhoids. We recommend a trial of Messrs. Bayley's Tablets, &c., which are to be obtained at 17, Cockspur-street, London, W.—*Vide HEALTH, April 8th, 1887.*

Prepared by BAYLEY & COMPY, Perfumers,

THE OLD CIVET CAT, 17, COCKSPUR-STREET, LONDON.

PRICE LISTS FREE ON APPLICATION.

## Findings from the Journals

"Th' ingredients of health and long life are  
Great temperance, open air,  
Easy labour, little care."—*Sir Philip Sydney.*

**Germs in our Homes.**—Although ventilation in our homes, schoolrooms, churches, and public halls has hitherto been mainly employed to dilute or drive out the carbonic acid which accumulates from our breath and bodies, Science, with her keen sense, has in these later days probed deeper. It has been found by the bacteriologist that bad air contains from 2,000 to 7,000 microbes—or organic germs—per cubic yard, and that good air has from 50 to 1,000 per cubic yard. It has also been found that what we term the "deafening" in our houses contains and gathers among its apparently harmless constituents the secret enemies of health—viz., various and innumerable micro-organisms, many of which, it may be safely presumed, are of a pathogenic or disease-bearing order. Very few people would consider it in the least degree necessary to ask the builder what kind of deafening he was going to put below the floors, and where he was going to get it, and if anyone ventured to be so very inquisitive, the builder would in all likelihood cast a pitying glance upon him and walk away, under the impression that softening of the brain had set in. Many of you may consider that sanitarians, in investigating such an apparently unimportant matter, are hard up for a job. Let us see! The German investigator, Emmerich, caused a floor to be lifted, and took out a sample of the "deafening" for careful investigation. It was alive with micro-organisms, contained more products of decomposition, and was more full of nitrogenous substances than are to be found in a large cesspool. The amount of sodium chloride, or common salt, was about 12 times more than the soil of a dunghill soaked with filth contains, and under the floor of one room over 6 cwt. of nitric acid, in the form of nitrates, were found. Now, when it is understood that these nitrates are formed by the oxidation of decomposing animal matter, it will easily be appreciated how the health of people, daily living above such a pollution, cannot be satisfactory. The micrococci or germs of pneumonia were found by Emmerich in great numbers under the floors over which persons had lived, and died from this disease, which had assumed periodically an epidemic character. When the cleanly housewife prepares for her yearly spring cleaning, and sends her carpets out to the green or back court to be beaten, she little imagines that the dust she sees flying off at every stroke, is largely composed of minute organisms from 500 to 1,000 times smaller than a grain of coarse pepper, and that the fine fresh odour of the newly cleaned room is due to the destruction and removal of these low forms of life which exist below her floor, and which will again find lodgment in all her fabrics. We must in our tenemental buildings have a deafening of some sort, and constructive science may discover in the future a better method than our present one; but for the present two things ought to be most carefully guarded against in the making of our floors—viz., First, that none of the materials which form the deafening in our houses is taken from any contaminating source; and second, that the flooring is thoroughly well seasoned, tongued, and grooved, and nailed close.—*Peter Fyfe.*

**Sweaters' Dens.**—The term "sweater" suggests insanitation, and to understand the motives which brought the question before us, we ask what is a sweater, and what a sweater's den? The wonder is that public attention has lain so long inactive, and had it not been for revelations of a startling nature, we might not have known what a sweater is. The term has been attached to foreign Jews for years past, and has grown with the industry, so that, whether a tailor be a sweater or no, he is styled one. He is so called because for a minimum amount of wages he extorts or *sweats* out of his victims a maximum amount of inordinate labour, even to fourteen and sixteen hours out of each twenty-four in which he has work to do; he is one who takes out work at the usual rate of wages and who gets it done by others at as low a price as he can find helpless workers to do it. The sweater's den is the workshop, generally the top room or rooms of a small dwelling-house, where the sweater's family, and, in most of them, lodgers also dwell; in it are the necessaries for carrying on his work; into it are squeezed as many persons as he can employ, who work each under a flaring gas-jet, and close to a large coke fire whereon pressing-irons are heated, and which, by pressing garments over a wet cloth, evolve a stench from the dye. The cubic space for each person may range from 103 to 200 feet; there is no ventilation unless doors and windows be opened to release the poisoned air, so that men who work in a semi-nude state, and women in profuse perspiration, are exposed to draughts and colds, where breath is inhaled again and again, and made more poisonous at every inspiration, where the products of coal-gas combustion envelops the room, which, aided by the heat of the coke fire, brings the room up to a temperature of 95 degs. or more. Such is a true picture of at least a thousand of those dens, and wherein eight to ten or twelve persons are employed. One can form a fair idea of the fearfully congested state of atmospheric impurity in house after house, and if we add the continually ascending coils of smoke from the cigarettes so generally indulged in, the collection of dust on walls and ceilings, the dirty floors covered with cloth cuttings and ashes, we complete a description of these smallest workshops sufficiently vivid to rouse the feelings of all public men who are responsible for the well-being of our operatives. To compare these places, legally called workshops, with any class of buildings wherein work is done and where the laws of health are imperative in their application, is but to intensify the horrors of these wretched shops, which so loudly call for immediate interference. But the workshops differ but little from the house, in each room of which women, children, and men dwell, many of them living and sleeping in a single room; amidst misery and dirt; the courts are filthy, each lodger contributing to the accumulation of refuse, animal, vegetable and mineral.—*Sanitary Record.*

A VENERABLE looking old man applied for a pint of California brandy last week at a druggist's stating that he wanted it to revive the colour of a work of art. "Ah, that is for a mechanical purpose," said the clerk, "and here it is." The old man signed for the liquor according to the requirements of the law, and, paying for it, started for the door. Before departing, however, he faced about, and with a droll expression on his countenance, said: "It's to revive one of the old masters." Too late the clerk realized that the old man regarded himself as an old master.

## IMPORTANT ANNOUNCEMENT.

### COMMENCEMENT OF A NEW VOLUME OF "HEALTH."

HEALTH, as our readers are aware, may be obtained of all Booksellers and Newsagents, and at the Railway Book-stalls, on the day of publication. It may also be ordered from the PUBLISHER, 2, Paternoster-square, London, E.C., who will send the journal, post free, for a year, on receipt of postal orders for 10s. 10d.

As many of our readers who live in remote districts prefer to obtain HEALTH from the Publisher direct, and as we are desirous of increasing the already large number of subscribers who give us a yearly order for the journal, we take the opportunity afforded by the COMMENCEMENT of a New Volume to offer the following FREE GIFTS and BONUSES to all who subscribe to HEALTH for one year or longer, on and after FRIDAY, APRIL 6TH, when the first number of Volume XI. will be issued:—

(1.) To each Subscriber who remits 10s. 10d. to the Publisher, entitling him (or her) to receive one copy of HEALTH, post free, for one year, we shall present a copy of Dr. Andrew Wilson's work, entitled "A Manual of Health Science" (Longmans & Co.), value 2s. 6d.

(2.) To each subscriber who remits 21s. 8d., entitling him or her to receive two copies of HEALTH weekly, post free, for one year (or one copy for two years), we will present Dr. Richardson's "Ministry of Health" (Chatto & Windus), value 6s. The copies of HEALTH so ordered may be posted to separate addresses.

(3.) To each person who subscribes 32s. 6d., for three copies of HEALTH, post free, weekly, for one year, we will present the volume by Dr. Richardson mentioned above, and also the handsome, illustrated book entitled, "Studies in Life and Sense," by Dr. Andrew Wilson (Chatto & Windus), value 6s.—being a free gift of the total value of 12s.

The bonus last mentioned will also be presented to anyone who succeeds in obtaining three yearly subscribers to HEALTH, and who remits to the Publisher the sum of 32s. 6d., together with the names and addresses of the persons to whom the copies are to be posted each week.

As the literary gifts above-mentioned constitute books containing solid and reliable information regarding health and other matters of popular scientific interest, it will be seen that the above scheme, while intended to increase our already large circulation, also offers distinct advantages to new subscribers who guarantee by their subscriptions a year's support to this journal. All communications regarding subscriptions and other purely business details connected with HEALTH should be addressed directly to the PUBLISHER, 2, Paternoster-square, London, E.C., and *not to the Editor*.

**A LATIN SCHOLAR.**—It is a fortunate wife whose husband not only knows more than she does, but has the grace to enlighten her ignorance without putting on airs. "I see that a post-mortem examination is often made in murder cases. What does a post-mortem examination mean?" asked a young wife of her better half. "A post-mortem examination, my dear, is intended to allow the victim to state, verbally, his own testimony against his assailant, and is taken down in writing." "Thanks, darling; and you won't look down on me, will you, because I haven't your education?" He said he wouldn't.

## Sanitary Appliances. Etc.

### PURE WATER.

THE importance of pure water for dietetic purposes can scarcely be over-estimated. As it is almost impossible to obtain pure water naturally, how to get it artificially has been a problem to mankind in every age. Many methods have been tried. The first and simplest, probably, was passing the impure water through porous stone. This makes a fairly good filter for a short time; but the pores get clogged up, and, owing to the density of the stone and other causes, the pores can scarcely be, and rarely ever are, cleaned out, so that these filters become non-effective in a short time, and may be set aside as impracticable for general use. Animal charcoal has also been largely used for a long time, but this too has very great drawbacks. It has been found to favour the production of low forms of organic life, a feature stamping it as unsuitable, except under more careful supervision than filters generally get. Spongy iron makes a good filtering media, but must be kept from the air or it loses its power. Vegetable charcoal and porous mineral charcoal are excellent purifiers and free from the objection raised against animal charcoal, as they contain nothing to favour the production of bacteria. These, however, when used alone require to be frequently renewed, or purified, and this necessity is often, if not always neglected. Hence such filters are often allowed to become inefficient. What is requisite seems to be the preservation of the vegetable or mineral charcoal as long as possible from contamination, so that they do not require frequent renewal, or washing. This can now be done by Howie's Patent Filter (made at Hurlford, near Kilmarnock, and advertised in our pages), which is composed of a thin, porous vessel of fire-clay, into which the impure water is first admitted, and through which it slowly percolates, leaving most of the impurities behind, and reaching the vegetable or mineral charcoal in a comparatively pure state. After passing through the charcoal, and being thus thoroughly purified, it has again to pass through a thin plate of porous fire-clay, and emerges into the reservoir real *agua pura*.

The porous clay vessel is thin, and, therefore, free from the objections reasonably urged against the clumsy stone filters, as it can be taken out and placed in boiling water for a short time; the pores being thus cleansed, it is ready for action again. When the vegetable or mineral charcoal is protected by such a porous vessel, it should not in ordinary cases require to be washed or renewed oftener than once a year. We understand that Howie's Patent Filter can be fitted with a porous vessel, then with mineral charcoal, then a sheet of asbestos, then a layer of spongy iron, and finally with the porous plate. This will certainly make a filter as perfect as science can suggest, and save a great amount of disease which results from impure water. Imperfect filters, and there are many such, serve only to delude those who use them.

Howie's Patent Filters allow the water to pass with fair speed, but not too quickly; time is allowed for proper contact with the filtering media. Rapid filters may be safely put down as imperfect filters, and it is much more sensible to have a large filter and obtain good water than a smaller filter, which may give exit to as much water, but only half purified. When people buy a filter, it should be one that will really purify the water, and not one that will allow the water to pass not much purer than it has entered. There is no comparison, indeed, between having pure water, slowly filtered, and having it filtered, however rapidly, if only partly purified.

**FALSE TESTIMONY OF CHILDREN.**—The trial at Tisz-Eszlar is probably sufficiently well in mind to serve as a type of the false evidence given by children. Dr. A. Motet has collected a number of similar cases, and shows very distinctly that the children in question are quite generally the subjects of morbid tendencies. Frequently they are the offspring of a degenerate stock, and are characterized by weakness of will, and a love for excitement. The analogy between these suggestions accepted and elaborated by these children in a waking condition, and precisely the same phenomena in hypnotic states is evident. Dr. Motet suggests several hints by which such testimony can be prevented from imposing upon the courts, and urges that a careful physician be summoned when any such suspicious testimony by a child is deposed. It illustrates anew the close connection between responsibility and nervous affections as well as between the doctor's study and the court's dictum.

"ELECTRICITY IS LIFE."  
(TRADE MARK.)

# PULVERMACHER'S

WORLD-FAMED  
GALVANIC BELTS,

FOR the CURE of NERVOUS DISEASES.  
HAVE RECEIVED TESTIMONIALS from  
THREE PHYSICIANS to  
HER MAJESTY the QUEEN,  
THE ACADEMIE DE MEDECINE of Paris and  
FORTY MEMBERS of the  
ROYAL COLLEGE of PHYSICIANS of LONDON.

## RECENT TESTIMONIALS.

### GALVANISM v. RHEUMATISM.

Dear Sir,—I am thankful to tell you that I have derived great benefit from your Galvanic Belt. After wearing it twenty-four hours I was able to walk; and now, at the end of six weeks, I am quite cured of inflammatory Rheumatism.—Very faithfully yours,  
(Rev.) G. L. BERNSON TUBBS,  
St. Mary's, Reading.

Mr. J. L. Pulvermacher, 194, Regent-street, W.

### GALVANISM v. STOMACH WEAKNESS.

Dear Sir,—I have much pleasure in informing you that I lent my Galvanic Belt to a fellow-patient for a few days and nights, and it has acted like magic in giving him relief from severe stomach trouble.  
The poor man desires to be grateful to you for the benefit received, and has purchased the Belt.

You are welcome to use this letter.—Yours respectfully, J. BARRETT.

Mr. J. L. Pulvermacher, 194, Regent-street, W.

### GALVANISM v. NERVOUS EXHAUSTION.

Dear Sirs,—I have the pleasure to inform you that the Galvanic Belt which I purchased from you last November has made a complete cure in my case. I was suffering from nervous exhaustion, and had tried several patent medicines without any success.

Your appliance is truly a wonder, and I am convinced from my own experience that any one who is suffering from loss of vital energy may be speedily cured by giving your Galvanic Belt a fair trial.—Yours truly,  
Messrs. Pulvermacher & Co., 194, Regent-street, W. C. MOON.

### GALVANISM v. LUMBAGO.

Dear Sir,—I am pleased to inform you that your Combined Belt quite cured my lumbago in a few days, and I shall have much pleasure in recommending your Belts among my friends and neighbours.—Yours truly,  
Mr. Pulvermacher, 194, Regent-street, W. T. ARMSTRONG.

### GALVANISM v. LUMBAGO and RHEUMATISM.

Dear Sir,—A lady friend of mine, somewhat advanced in years, having suffered severely from lumbago and weakness in the back, was unable to walk without the aid of a stick.

I allowed her the use of my Pulvermacher Battery, for a few weeks, and she is now able to walk without pain or trouble, and is looking healthy and well.—Yours faithfully,  
W. GRAINGER.

Mr. Pulvermacher, 194, Regent-street, W.

### GALVANISM v. NERVOUS SICK HEADACHE.

Dear Sir,—I am happy to write and tell you how greatly I have benefited by the use of your Combined Belt.

My case of nervous sick headache I have suffered with from a child, and have been under various doctors, but have never been relieved as I have been the last two months, since I have commenced your treatment.

Thanking you for your kind attention.—Yours respectfully, E. STEAD.

Mr. J. L. Pulvermacher, 194, Regent-street, W.

### GALVANISM v. LUMBAGO and WEAKNESS in the THROAT.

Gentlemen,—I have great cause to be ever thankful for having invested in one of your Galvanic Belts. You will recollect I was suffering from lumbago and weakness in the back; but your Belt entirely cured me in less than a week.

At the same time I was suffering from a weakness in the throat, and my wife suggested I should apply the Belt to my throat, which I did, and in a few days the weakness entirely disappeared, and I have had no return of it since.

You may make whatever use you please of this letter.—Yours truly,  
Messrs. J. L. Pulvermacher & Co., 194, Regent-street, W. W. BARKIN.

### GALVANISM v. NERVOUS EXHAUSTION.

The distressing symptoms of Nervous Exhaustion and Debility are speedily removed by means of PULVERMACHER'S world-famed GALVANIC BELTS, which are so arranged as to convey a powerful electric current direct to the affected parts, gradually stimulating and strengthening all the nerves and muscles, and speedily arresting all symptoms of waste and decay.

### A DVICE PERSONALLY or by LETTER, free of charge.

FOR FURTHER TESTIMONIALS, both Medical and Private, see new Pamphlet, "GALVANISM: NATURE'S CHIEF RESTOREE OF IMPAIRED VITAL ENERGY," post free on application to

J. L. PULVERMACHER AND CO.,  
GALVANIC ESTABLISHMENT,  
194, REGENT-STREET, LONDON, W. (nearly opposite Conduit-street).

## Our Letter-Box

"Conference [maketh] a ready man."—Bacon.

### NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to "THE EDITOR OF HEALTH," 2, PATERNOSTER-SQUARE, LONDON, E.C. Those intended for the Publishing Office to be sent to MR. A. P. WATT, THE PUBLISHER, at the same address.

### RULES FOR CORRESPONDENTS.

OWING to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring replies in the LETTER-BOX DEPARTMENT of HEALTH, to the following rules:—

1. All questions are answered free of charge in the columns of HEALTH.
2. All letters must be legibly addressed to "The Editor of HEALTH, 2, Paternoster-square, London, E.C.," and to no other address.
3. Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of HEALTH. A stamped addressed envelope must accompany all queries to which a private reply is desired.
4. Addresses of physicians and surgeons will, as heretofore, be forwarded FREE to Correspondents on their enclosing a stamped addressed envelope for reply.
5. Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.
6. From the necessity of sending HEALTH to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.
7. No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.

## LETTERS TO THE EDITOR.

### MR. TEBB'S ALLEGATIONS REGARDING CANCER AND VACCINATION.

SIR,—Mr. Tebb's defence of his opinion, that the increased mortality from cancer is due to vaccination, is even feeble than I expected to find it. I asked him for the family history of the case, and he replies that the statement is not his, but is to be found in Makuna's Inquiry. But if Mr. Tebb adopts the statement, he should surely verify it to begin with, so as to be able to defend it when challenged. He does not even say which of Makuna's witnesses it was who made the statement. I had, therefore, to procure a copy of the Inquiry for myself, when, lo and behold! the "witness" is one of his own Vice-Presidents, and even he says nothing about family history. This, at any rate, gives emphasis to his own words, that such "testimonies should be weighed as well as counted," and perhaps too it justifies me in my original proviso, that "there must be no shuffling." In trying to "weigh" the value of Mr. Tebb's next authority I am fairly dismayed, for he neither gives name, nor date, nor place. What was the name of the "old established children's hospital?" in what part of "the north of England" was it situated? and who was "the medical superintendent?" Next we have "Dr. William Forbes Laurie, late medical director of St. Saviour's Cancer Hospital, Regent's Park." But Mr. Tebb should have mentioned that the hospital, as well as the director, is "late," for, so far as I can make out, there is now no such hospital on the face of the earth. Apparently there was an institution there, for a few years, in the seventies; but its life history must have been of the shortest. Its "director," Dr. William Forbes Laurie, was a village doctor in Bedfordshire. How he could have charge of a London hospital, probably no one but Mr. Tebb knows. Here again, however, Mr. Tebb forgets to give the reference to the words he quotes from Laurie, so that once more we have only a partial knowledge of the "weight" of the testimony, and that partial knowledge would lead us to suppose that absence of weight is its leading feature. Next we have Dr. Dennis Turnbull, the "weight" of whose testimony I cannot estimate, for again the reference is omitted. But Dr. Turnbull seems not to be connected with any hospital either for cancer or anything else.

Mr. Tebb, however, shows by the above array of authorities that he believes in the weight of all the medical evidence that happens

to "jump" with his own views. Will he also permit your impartial readers to attach more value to the evidence of the whole medical profession of this country that cancer is *not* spread by vaccination? Even in Makuna's Inquiry, which appears to include so many of Mr. Tebb's supporters, only one solitary Vice-President had the audacity to set down cancer as a result of vaccination. But Mr. Tebb rejects the significant silence of the 399, and adheres to the isolated opinion in the affirmative. Mr. Tebb's case for cancer seems in part to be built up thuswise—Syphilis is inoculable by vaccination, and syphilis may cause cancer. But it is simply astounding to find that Mr. Tebb quotes Dr. Creighton as "pointing to similar conclusions," if, as you, Mr. Editor, have said, Creighton denies that syphilis is inoculable. As to Mr. Tebb's 50 syphilitic infants, from "some of which" (*sic*) vaccine lymph was taken, why does he not tell us in what number of the *Hospital Gazette* the report occurs, so that we may learn (1) from *how many* the lymph was taken, and (2) if in *any case* syphilis was inoculated? If it *was* inoculated, then Dr. Creighton, to whom he appeals, must be wrong, and if it *was not* inoculated, then what does he mean by making the reference? As to statistics, Mr. Tebb gives none. But on looking into Dr. McVail's book, I find an adequate reason for his silence on this point. *The statistics are all the wrong way for anti-vaccinators.* For "the mortality under five years of age has diminished by 40 per cent."—that is, when vaccination is fresh in the blood. Further, "as age advances, and the influence of vaccination lessens, the rise in cancer becomes more and more pronounced." Once more, "while vaccination has spread alike among males and females, cancer has spread much more largely among males than among females." How in the world does Mr. Tebb's theory of cancer account for that fact? Then Dr. McVail quotes the explanation of the Registrar-General that cancer is better diagnosed than formerly, and that deaths once set down to tumour, &c., are now set down to cancer, and that this improved knowledge of cancer has more influence on the male registration than on the female, as, among men, cancer oftener causes internal troubles not formerly understood, but now recognized as cancerous. So that Mr. Tebb has now to (1) give us some more distinct information as to his various authorities, particularly as to the North of England Hospital, and (2) to tell us why, if cancer is due to vaccination, cancer has greatly decreased among persons under five years of age, who are most of all influenced by vaccination, while it has increased far more in men than in women, though the sexes are *equally* vaccinated.—I am, yours, &c.,

OBSERVER.

[As to Mr. Tebb's defence of strong language "when a parent loses a healthy child by an operation described as benign," is it worth pointing out that he is here begging the whole question, which is, in any such case, *did* the parent lose the child by vaccination? For ourselves, we have never seen any certificates on the part of the adversaries of the *Vaccination Inquirer* that it is "conducted with singular fairness and impartiality." We have given the anti-vaccinationists once more rope enough. Mr. Tebb and his neighbours make specific statements, but in the end answer criticism by the most vague of generalities. This being so, we must, in the interests of our readers, declare this correspondence closed. People must soon grow weary of a controversy wherein the accurate fighting is all on one side, and that, in this case, assuredly is not Mr. Tebb's side.—ED. H.]

## ANTI-VACCINATIONISTS AND THEIR CANCER SCARE.

SIR,—Mr. Tebb's reply to the challenge of "Observer" that he should produce evidence for his (Mr. Tebb's) statement that cancer may follow from vaccination and be caused thereby appeared in your issue of last week. The expected in this case has happened. Instead of Mr. Tebb being prepared to lay before us evidence in support of the grave charge he made against vaccination, as a cause of cancer, I find, in his letter of last week, firstly, an attempted defence of the utterances of the organ of the anti-vaccinationist party, and secondly, a collection of the opinions (mark you, not facts) of three medical men—one anonymous—and of two journals, the extracts from the latter having not the slightest connection with the subject under discussion. It is hardly to be conceived that Mr. Tebb can be serious in expecting any one who read his charge against vaccination to rest contented with the puerile display of reasoning he makes in reply to "Observer's" legitimate demand for evidence. He challenged Mr. Tebb to produce the facts which warrant the anti-vaccinationist statement that cancer may be a direct consequence of vaccination. What does Mr. Tebb offer "the waiting world" by way of reply? The "belief" of some three medical men, whose mere opinions, apart from their professional status, in this grave matter, are worth nothing at all. One of Mr. Tebb's medical men had "traced" many of the diseases which afflicted children under his care, "particularly those of a tumorous (*sic*) and cancerous character, to vaccination." When

## TO THE READERS OF "HEALTH."

THE extraordinary statements of General W. F. Nuthall, Captain J. Paige, Rev. C. G. Squirrell, Rev. James Brierly, M.A., J.P., and other prominent men that have appeared in these columns in the past, have not only attracted much attention, but have awakened doubts in the minds of some as to their genuineness. They were, however, correct in every particular, as the following local statements amply confirm:—

244, Brockley-road, Brockley, S.E., Nov. 25, 1887.—I feel it my duty to write and thank you for the bottle of Warner's SAFE Cure which I was persuaded to try, suffering as I have done for so long a time from indigestion and other complaints caused by a sluggish liver and disease of the kidneys. I had tried nearly all the remedies advertised without any good effect, and I am grateful indeed to my friend who recommended me to try Warner's SAFE Cure, for after taking only one bottle, I can truly say that I was astonished at its quick efficacy: it took away all my pains, and I feel quite another being. I have, and you may depend shall continue, to press all my friends suffering from the liver and complaints of the kidneys to take that medicine. You can make what use you like of this letter, as I am grateful to you for producing such medicine, which gave me the relief I had been seeking without avail for so long a time, and I can only hope that all suffering from the complaints named will be induced to try it.

(Signed) J. PRIOR.

40, Haymerle-road, Peckham, London.—I have long been suffering with gravel, for which I have tried many remedies, but derived no special benefit. I also consulted a noted specialist for the bladder, and resulting in stone in the bladder. Two years ago I was obliged to undergo an operation, and had a very large stone taken from me, which gave me temporary relief; but the gravel kept passing and accumulating as formerly, the pains in the region of the loins and back were frightful, and I wasted away to a mere shadow, having when in health weighed 11 stones. I could not find any permanent relief until I commenced taking "Warner's SAFE Cure," which was recommended to me. Under its use I soon began to pass stones, of which some ten to fifteen large ones have come away, with a large quantity of gravelly sediment. The pains ceased, and I began to gain flesh after the first bottle or two. I consider the change a miraculous one, and my doctor compliments me on the wonderful way I have recovered since taking the "Warner's SAFE Cure." My husband is so pleased with the good the medicine has effected in my case that he is recommending it to everyone he meets.

ROSE PENDALL.

Statements like the foregoing are certainly conclusive evidence of the wonderful merits of this remarkable medicine. No better verification of its purity and power can well be asked. The above testimonials are not from unknown and obscure persons, residing in distant parts of the kingdom, but are the voluntary statements of neighbours and friends living in your own locality, the truth of whose assertions can be easily verified. Are not such proofs sufficient? We can show thousands of similar testimonials from people all over the world. Shake off prejudice! Use the favourite remedy—Warner's SAFE Cure—and enjoy health. For sale by all medicine vendors throughout the world, at 4s. 6d. per bottle, or can be had direct of H. H. WARNER, 86, Clerkenwell Road, London, E.C.

Mr. Tebb says "traced" does he really mean what he says, or is he only quibbling with words? If such diseases of children—what "tumorous" ailments may be I know not—have been "traced" to vaccination, all I can say is that the medical profession remains to this day in ignorance of this really important discovery. When we are all anxious to know what cancer is, how it originates, and what are the conditions under which it is propagated, Mr. Tebb's medical friend's "tracing" of cancer might prove a singularly startling piece of research. It is exceedingly significant as showing the source of Mr. Tebb's information, that science has heard, as yet, nothing of the researches of Mr. Tebb's anonymous medical paragon. Then comes the opinion of "Dr. William Forbes Laurie, late medical director of St. Saviour's Cancer Hospital, Regent's Park," who was so thoroughly convinced "that the increase of cancer was due to vaccination" that "he wrote to members of Parliament, inviting them to visit the Hospital and witness the results of the vaccine operation." This sounds very convincing; but is Mr. Tebb going to furnish us with evidence of the truth of Dr. Laurie's statement? Are we expected to swallow the bare opinion of Dr. Laurie, and then, in Mr. Tebb's own bland and child-like attitude towards every item which he thinks opposes vaccination, start forth and declare that the origin of cancer from vaccination has been proved? If so, the credulity of anti-vaccinationists can only be said to equal their ignorance of the grave problem which they have raised in this matter of cancer. Then comes the opinion—belief again, not fact be it observed—of a Dr.

Dennis Turnbull, with whose name as an authority on cancer, I do not think the world of medical science is at all well acquainted, unless, indeed, this is the gentleman who advertises in a religious paper that he is prepared to treat cancers by what he calls his "organic cure" (whatever that may be) and "without the knife." This gentleman, Mr. Tebb says, concurs in the opinions of the two medical men already quoted—that is to say, Mr. Tebb starts with an opinion and seeks to bolster up belief or theory by aid of other opinions, equally valueless as evidence in the question at issue. The newspaper extracts prove nothing more than that the connection between syphilis and cancer has yet to be fully proved. Even if this relationship were proved, Mr. Tebb is yet very far indeed from having proved that syphilis, as the initial stage in his cancer-production, is communicated as a matter of course by vaccination. No one should know better than Mr. Tebb that this latter point is exactly one which has not been proved at all, and as regards Dr. Creighton's views, these have already been discussed in HEALTH. Suffice it to say Dr. Creighton's opinions have not by any means received the concurrence of his professional colleagues. In a word, Sir, "Observer" asked Mr. Tebb for bread and he gives him a stone. Mr. Tebb was asked to prove what his flourish of trumpets seemed to indicate he was capable of proving—that cancer may follow, and be caused by, vaccination. In reply he gives us a few opinions which could only carry weight at all by reason of the celebrity of their authors, and I scarcely think the names quoted by Mr. Tebb can be justly termed those of leading medical lights. Because someone, whom, without offence, one may dub an obscure medical man, asserts that he believes cancer to be caused by vaccination, Mr. Tebb is only too ready to swallow this very poor morsel of anti-vaccinationist information, but if Mr. Tebb chooses to support his case in this fashion, the less he talks of the power and fairness of his arguments the more consistent will he be considered. You gave Mr. Tebb a chance to make good his assertions. He has utterly failed to do so, and you may therefore leave him in the enjoyment of the glamour of a movement, which, in respect of its pitiful agitation, merits the contempt of all thinking persons.—I am, Yours, &c.,  
MEDICUS.

## QUERIES AND ANSWERS.

### REPLIES: GENERAL, SANITARY, AND MEDICAL.

[Readers of HEALTH will kindly note that when back numbers of the journal are desired, the letters containing such requests and stamps for the numbers should be addressed to the PUBLISHER of HEALTH, 2, Paternoster-square, London, E.C., and not to the Editor.]

**A BRECHIN CLERK.**—Drink Vichy Water regularly, for a time, and after your meals take the Fer Bravais as ordered to "A Farmer" in the present number. Try also the effect of wearing an Alcock's Porous Plaster across the loins. If not bettered, write again.

**BELLISSIMA.**—1. Nothing will remove such marks short of taking off the skin. 2. Difficult of removal; try applying a lotion made by adding one part friar's balsam to nine parts of rose water. 3. If the eye-pupil is naturally larger (that is, not a result of disease), you had better leave it alone. 4. Rest after your meals, and avoid excess of vegetables; or take five drops pure terebene on a piece of sugar, after meals. 5. Attend

### AN IMPORTANT DISCOVERY.

The *Whitehall Review* contains the following, relative to a discovery which is just now causing considerable stir throughout Great Britain: It has been made the subject of considerable comment and investigation on the part of various newspapers. A representative of this journal was commissioned to investigate its merits by personal interview with the parties who could speak from actual experience. From the results as given below it may well be claimed that the general adoption of this remarkable agent will cause a revolution in certain quarters. "The first gentleman interviewed was Mr. William Howes, the well-known civil engineer, No. 68, Red Lion-street, High Holborn, London. Mr. Howes stated that for over twenty years he had been constantly and severely afflicted with rheumatism. At times his hands had been swollen to twice their natural size. Again, his joints became so stiff and painful that he could not walk, and his feet so sore that he could not bear his weight on them. He had at different times tried physicians, and many remedies which had been recommended to him as a cure for his complaints. But he derived no benefit whatever. An acquaintance, who had himself been cured of a severe rheumatic trouble, gave him a bottle of this new discovery, which he applied once with such unexpected and marked benefit that he procured another, which, to use his own language, 'settled the business,' by removing the pain which he had not been free from for twenty years. Mr. Howes said that had he not used St. Jacobs Oil, he would now be in bed instead of attending to his business. He added, 'Its effects were simply magical. It produced a complete cure. I will also add that numerous friends and acquaintances, suffering from rheumatic and neuralgia affections, to whom I recommended the oil, speak of it as wonderful. It seems to effect a cure in every case.'

"The name of Mr. C. H. Palmer, Secretary of the Conservative Defence Association, and Overseer of the District of Islington, having been mentioned to the reporter, this gentleman's opinion was sought and cheerfully given in the following language: 'For a long time I have been a great sufferer from neuralgia in my face and head, and rheumatism in my limbs,' remarked Mr. Palmer. 'After trying various remedies without obtaining relief, and having learned of the signal benefit which several friends who had been suffering from severe rheumatism derived from the oil, I procured a bottle, the use of which completely removed every trace of pain. I do not hesitate to recommend it as a most valuable discovery.' 'It may be added that in its current number the *Magazine of Pharmacy, Chemistry, and Medicine* devotes considerable space to a discussion of the extraordinary power of St. Jacobs Oil, and cites some astonishing cures. It appears, also, that this remedy received no less than six gold medals during the past year at the International and other Expositions. One of these was awarded at Calcutta, another at the great Southern Exposition in the United States. Judging from the foregoing, St. Jacobs Oil will prove of incalculable value to the army of sufferers from such diseases as those enumerated, and the public will be indebted to the press for calling attention to its efficacy."

to diet and directions under head 4. 6. Yes; possible, but not usual. Depends on some sympathetic irritation.

**DAISY.**—Avoid chills, which are the cause of your symptoms; and use a little Beetham's glycerine and cucumber lotion as an application to the skin; and eat plenty of vegetables as part of your diet. Write again, if not cured.

**OMEGA.**—1. Address your inquiries to Messrs. Burroughs, Wellcome & Co., Snowhill Buildings, London, E.C. 2. Yes; the Cod Oil is more easily digested. 3. Try milk peptonized with Fairchild's Powders, to be had of any druggist—made by Burroughs, Wellcome & Co.

**B. D. E.**—Address your inquiries to Messrs. Churchill, 11, New Burlington-street, London, W., and to Messrs. Griffith, Farran & Co., St. Paul's Churchyard, London, E.C., respectively. Any bookseller will procure the books for you, and save you postage and trouble.

**J. T.**—Disturbance of the liver; try a dose of Lamplough's Pyretic Saline occasionally in the morning, and use the Cascara Cordial as recommended to "Nobilis" last week. Avoid excess of meat-diet.

**MIDDLESEX.**—Try the effect of taking a little Boköl with your dinner each day. Your symptoms indicate dyspepsia of a slight character. See advice given to "Bellissima" above, under head 4. The lotion recommended to that correspondent may also be tried.

**W. H. (Bristol).**—Read the pamphlet, "A Lecture to Young Men," post free for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C., and follow out the directions therein given as to diet, &c. You need be under no alarm.

**A NEW SUBSCRIBER (Liverpool).**—Try the effect of applying a little boracic ointment to the parts night and morning, and give up butcher-meat for a time, taking plenty of vegetables, with farinaceous foods, Tritola, milk puddings, and white boiled fish occasionally. If not cured in a few weeks' time, write again.

**CONJUGIUM.**—Not unless it is of very pronounced character. The only permanent means of relief is a slight surgical operation. Consult a surgeon, who will be able to inform you at once whether an operation is needed at all.

**LWYD.**—Try the effect of taking twenty grains bromide of potash at bedtime in a wineglass of water. When we suggested you should consult an ear-surgeon we certainly did not mean you to consult a local doctor, who, by your account, appears to have done you no good. You would have been much better advised had you applied for advice to a London hospital for ear diseases.

**P. A. LUNDBERG.**—You might try such a hair-wash as that ordered to "Eliza H." in HEALTH, No. 255; but if this does not suffice, you will have to use a dye. Apply to the French Hygienic Co., 56, Conduit-street, London, W., who will supply you with a safe dye. Look to your general health, as such a symptom in the way of hair-weakness often arises from a lack of tone. Try the Fer Bravais as ordered to "A Farmer" in the present number.

**IRA.**—We have no confidence in any such remedy. If anything can be done, it can only be effected by a surgeon. Consult a good surgeon, and take his advice on the matter. You should read a letter on this subject, by a surgeon, which appeared in HEALTH, No. 222, to be had from the Publisher for 2d. in stamps.

**CURIOUS PULSE.**—The average rate is between 70 and 80, but very liable to be increased or slowed by circumstances. You probably possess a naturally slow pulse. The female pulse is, on the whole, about the same as that of the male.

**MRS. A. SUMMERS.**—See and follow advice given to "Brummagem" in *HEALTH*, No. 260. The use of Cascara and diet there ordered should cure you. If not, write again.

**QUERCUS.**—1. If your standard of general health is good, self-command and habit will, in time, enable you to overcome your nervousness. If you need a tonic, try fifteen drops Fer Bravais in water after your meals. 2. What do you mean by the "milk" in such a case? and can you give us the reference to Darwin you name? Read the pamphlet, "A Lecture to Young Men," post free for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C., and it will afford you useful information.

**FANNY G.**—Rest after your meals, and try Himrod's Asthma Cure, to be had of any druggist. Burn a little of this, and inhale the vapour when your symptoms trouble you. If not bettered, write again.

**H. E. B.**—The brush you use is the cause of the scurf. You should use a very soft brush only, and no hard or small combs at all. For the rest, rub a little glycerine of borax into the roots of the hair each morning; and after you are cured of scurf, use the lotion, &c., recommended to "Bald One" in *HEALTH*, No. 259.

**ANNUAL SUBSCRIBER.**—Try the effect of taking twenty grains bromide of potash dissolved in water when your symptoms trouble you. If this does not cure you, after a fair trial, write again. The cause of such symptoms is very obscure.

**JOURNALIST.**—If you took a small cup of tea in the morning before rising, it might aid your cure; while through the day you might benefit by following advice given for the throat to "Peebles" in *HEALTH*, No. 260. At night, also, try inhaling the vapour of hot water to which a little Friar's Balsam or Stern's "Pumiline" has been added. If the uvula is at fault, a surgeon can easily remedy this condition.

**DAN.**—You must regulate your food to better purpose. In the main, follow out the directions given to "Brummagem" in *HEALTH*, No. 260, and when your attack threatens begin your treatment by taking a dose of Lamplough's Pyretic Saline; by

leaving off all flesh-meat; and by taking vegetables, Marshalls' Tritola, and like foods. The Cascara Cordial will probably ward off your symptoms if taken regularly and in conjunction with the food indicated in the advice noted above.

**MABEL L.**—Give up the tonic for a time and take twenty or thirty drops of Cascara Cordial twice daily between your meals. Eat whole-meal bread, stewed fruits and vegetables, and avoid tea and coffee. Substitute for tea, morning and night, Scott's Midlothian Oat Flour. You must not take aperients as a remedy for constipation, as they only increase the evil. Try the dietary above indicated, and let us hear the result in a few weeks' time.

**O. P.**—See article on removal of hairs by electricity in *HEALTH*, No. 149. If desired, we can send you address of a specialist in London on receipt of stamped addressed envelope.

**NOLL.**—You cannot restore the colour of the hair by any such preparation as Brillantine. This hair preparation is made by dissolving one part of castor oil in four parts of Eau de Cologne. Another formula is, one part each of glycerine and Eau de Cologne, two parts of honey, and four parts of rectified spirit.

**FRANCES D.**—Give the child Mellin's Food with milk; no other is suitable for the child, and we advise you to see that no starchy food is given to it on any account whatever.

**PRINCE.**—You will find the question you ask fully and completely answered in the pamphlet, "A Lecture to Young Men," published by H. Renshaw, 356, Strand, London, W.C., post free for 1s. 1d.

**A. FARMER.**—Use Bayley's Soap only for the skin, and take hot baths occasionally at night. If there are blackheads in the skin press them out, and sponge the parts thereafter with a little Eau de Cologne or Toilet Vinegar. Internally, take regularly for a time twenty drops of Fer Bravais in water thrice daily, after your meals.

**MORA.**—For chapped hands use the following: Glycerine, one ounce; rose-water, half an ounce; carbolic acid, ten grains. Mix and apply night and morning.

**PRIMROSE DAME.**—Clearly your duties and irregularity in meals are at the root of your troubles. If you are worried over your work, you can easily account for your nervous dyspepsia, and for your appetite returning after quiet and rest. Our advice is that you should take very light meals during your school hours, and take a solid dinner in the evening, say at six or seven. See that you rest after meals, and try also the effect of Fer Bravais as ordered to "A. Farmer" above. Let us hear the result of this advice.

**LAMENT.**—You may find the following mixture effect a cure:—Carbonate of ammonia, one drachm; bicarbonate of potash, a drachm and a half; infusion of chiretta, six ounces. Mix. A tablespoonful thrice daily before food.

**PETER HAY.**—We advise you to read the pamphlet "A Lecture to Young Men"

(post free from Mr. Renshaw, 356, Strand, London, W.C., for 1s. 1d.), for full instructions regarding a case like yours.

**ALBERT R.**—You should be examined thoroughly by a competent physician. We can send you address of such, if desired, on receipt of a stamped addressed envelope. There is, probably, a constitutional cause in your case, which only a physician can detect, and this after examination.

**ANTI-VAC.**—The topic is worn threadbare. We regret that you do not see this fact, and that we cannot spare space for your communication.

**GEORGE MORISON.**—You have evidently been perusing quack literature. The person you name in your letter is a notorious London quack. Read and study carefully the pamphlet recommended to "Peter Hay" above, and learn the true means of restoring your tone. The disease you name has, as a rule, an existence only in the fancies of ignorant persons, and in the lying statements of quacks.

**FARQUHAR.**—See "Note by the Way" regarding a freckle cure in *HEALTH*, No. 148. Another cure is that of touching the freckles with a crystal of common nitre; and a third is an application of a lotion made by adding one part Friar's Balsam to twenty parts of rosewater.

**MAX.**—Take a dessertspoonful of Scott's Pure Cod Oil Emulsion with Hypophosphites twice or thrice daily after your food as a strengthening measure. Try a warmer residence, such as Torquay or Bournemouth. It is probable that a short stay there might cure you, and render your present residence suitable.

**PANSY.**—We advise you to give Mellin's Food a trial in the case of your child. A hot bath given at night will probably relieve the symptoms named.

**THROAT.**—Inhale, at bedtime, the vapour of a pint of hot water to which Stern's Pumiline has been added. After your meals, take a dessertspoonful of Scott's Cod Oil Emulsion with Hypophosphites, thrice daily, as a general strengthening measure.

**ROBINA.**—You should rest after your meals; avoid vegetables; take light foods—soups, milk, white fish boiled; light puddings, &c., for a time, and try Lactopeptine with your food. If acidity is present you may try the following: Subnitrate of bismuth, six grains; carbonate of magnesia, ten grains; powdered gum arabic, twenty grains. Mix to form a powder. Stir in a cup of boiled milk, and, when cool, stir up again before being swallowed. To be taken twice daily after food.

**HAIRLESS.**—Try the following for the hair: Bay rum, two ounces; glycerine, two ounces; tincture of cantharides, one drachm; oil of bergamot, half a drachm; sulphate of quinine, ten grains; water, four ounces. To be used every morning, and to be rubbed into the roots of the hair, all other oils and pomades being avoided. Use a soft brush only, and wash the hair once in a week or ten days, at night, with Bayley's Spermacei Soap and tepid water.

**Certain HARNESS' Cure.**  
**ELECTROPATHIC BELT**  
 FOR  
**CHANGE OF LIFE**  
 Mrs. HAWKEY, 41, Naylor Street, Caledonian Road, London, N., writes:—"Harness' Electropathic Belt has completely cured me of the extreme debility and exhaustion, accompanied by painful hysteria, defective circulation, and periodic irregularity."  
 Guaranteed to generate a mild continuous current of Electricity, which speedily cures all Disorders of the Nerves, Stomach, Liver and Kidneys. Thousands of Testimonials. **Pamphlet & Advice free on application to Mr. C. B. Harness, Consulting Electrician, the Medical Battery Co. Ltd., 52, OXFORD ST., LONDON, W.** (Corner of Rathbone Place.)  
 Call to-day, if possible, or write at once

**ANTI-CATARRH**

**DR. BIRLEY'S ANTI-CATARRH.**—A wonderfully efficacious remedy for Colds of every kind: Influenza, Catarrh or Cold in the Head, Sore Throat, and all attacks resulting from a cold or chill. Absolutely harmless and extremely pleasant to take. Order through any Chemist, &c. or direct from the Proprietors, **E. BIRLEY & Co. 1, Cecil Street, Strand, London.**

RICH IN PHOSPHATES & NITROGEN.  
NOT FARINACEOUS.

Extract from the report of Dr. A. STUTZER, of Bonn, on  
"Mellin's Food":—

"Starch is entirely absent, and the carbohydrates present must consequently be easily assimilable. These carbohydrates consist of maltose-sugar, dex. rine, and milk-sugar, so well adapted for the nourishment of the infant's organism, whilst cane-sugar, which has an unfavourable action upon children because it produces an excess of acids in the stomach, is entirely absent."

"As the result of my analysis and experiments, I must hold that MELLIN'S FOOD, when properly prepared for use, is very excellent, and fulfils all the requirements of a Food for Infants."

"Bonn, Jan. 23, 1887."

Pamphlet, with full Report and Analysis,  
free on application.

PRICE 1/6 & 2/6  
PER BOTTLE.



MELLIN'S  
LACTO-GLYCOSE  
OR  
MILK FOOD.

Price 2s. and 3s. per Bottle.

In this preparation Milk is incorporated with the Food in the process of manufacture, thus making it specially suitable where a difficulty exists in procuring fresh cows' milk, as, for instance, on board ship and in hot climates.

Sample and Prospectus on application to the Inventor and Manufacturer,

G. MELLIN, Marlboro' Works, Peckham, S.E.

## "Fer Bravais" The Finest Tonic.

FOR POORNESS OF BLOOD, ANÆMIA, AND GENERAL WEAKNESS.

LANCET.—"Colloid hydrate" of iron. "Neutral and tasteless solution." "A beautiful and interesting preparation."

BRITISH MEDICAL JOURNAL.—"A remarkably valuable preparation." "Has all the good effects of iron without producing constipation or disturbing the digestion," and "does not blacken the teeth." "An eminent London Physician writes to us, 'I HAVE TRIED IT EXTENSIVELY, AND HAVE GIVEN IT IN CASES IN WHICH NO OTHER FORM OF IRON COULD BE TAKEN. IT IS THE BEST preparation of iron I HAVE MET WITH.'"

Sold by all the principal Chemists and Druggists, in Bottles in portable Card Cases, with Drop Measure complete, sufficient for six or three weeks' treatment.

ESTABLISHED OVER  
SIXTY YEARS.

**PULLARS'**  
**DYE-WORKS,**  
**PERTH.**

By Appointment to Her  
Majesty the Queen, 1852.

J. PULLAR & SONS intimate that in their Works there is every convenience and appliance for Cleaning and Dyeing in the best style the varied and expensive materials in use for Ladies' and Gentlemen's wear, as well as for Household purposes. They direct attention to the superiority of their workmanship, and to the regularity and speed with which articles are returned.

RECEIVING OFFICES IN  
{ 18, CHENIES-STREET, W.C.  
LONDON { 8, SLOANE-STREET, S.W.  
{ 64, FINSBURY-PAVEMENT, E.C.

BRIGHTON—152, WESTERN-ROAD.  
And Agencies throughout the Kingdom.

Addresses and large Catalogue Post Free on application to  
PULLARS' DYE-WORKS, PERTH.

COMPLETE ARRANGEMENTS FOR THE PARCEL POST.

**GREAT BODILY STRENGTH.**—  
PEPPER'S QUININE AND IRON TONIC.—By its fusing new life and strengthening the muscular system.

**GREAT NERVE STRENGTH.**—  
PEPPER'S QUININE AND IRON TONIC braces up the nervous system, and increases the strength of the pulse.

**GREAT MENTAL STRENGTH.**—  
PEPPER'S QUININE AND IRON TONIC, by its supporting influence on the body and nerves, repairs the ravages caused by over-taxing the brain power.

**GREAT DIGESTIVE STRENGTH.**—  
PEPPER'S QUININE AND IRON TONIC strengthens the stomach, stopping sinking sensations, removes indigestion, heartburn, palpitation, &c. Bottles, 16 doses, 2s. 6d.; next size 4s. 6d. Sold everywhere. Insist on having PEPPER'S.

**PEPPER'S TARAXACUM and PODO-  
PHYLLIN.** A fluid combination for derangement of the liver, particularly when arising from slight congestion. By gently stimulating the action of the liver and slightly moving the bowels, the heavy drowsy feeling, headache, pain beneath the shoulders, at the chest after eating, unpleasant taste in the mouth, and manifold other indications of dyspepsia, are removed. Bottles, 2s. 9d. Sold by all chemists.

**"SULPHOLINE LOTION."**—Clears off all imperfections in a few days. Spots, Blemishes, Irritating Objectionable Appearances, Redness, Roughness, Tan, Uncomfortable Skin Disfigurements, &c., however obstinate, entirely fade away, leaving the Skin smooth, transparent, supple, natural, and healthy. Perfectly harmless. Sulpholine is delightfully fragrant, cooling and refreshing; counteracts effects of weather, softens, and preserves. Bottles, 2s. 9d. Sold everywhere.

**LOCKYER'S SULPHUR HAIR RE-  
STORER** is the safest and best. In a few days it gradually deepens grey hair to a perfectly natural shade. Lockyer's surpasses the effect of costly washes. Never disappointing. Guaranteed harmless. Large bottles, 1s. 6d. Sold everywhere.

Café Noir in Perfection and at a Moment's Notice!!

---

THOSE WHO PREFER COFFEE WITHOUT CHICORY  
SHOULD USE

**SYMINGTON'S**

" EDINBURGH "

**PURE COFFEE ESSENCE.**

Guaranteed to consist of all the soluble constituents of Coffee with the sole addition of Pure Sugar, the grateful aroma of the freshly-roasted beans being retained by a special process.

Their NEW Shilling Bottle makes 30 Cups of Coffee equal to that made direct from the FINEST Beans.

---

N.B.—SYMINGTON'S PURE ESSENCE will be found of the Greatest Service for imparting the Delicious Flavour of Coffee to Ices, Cakes, Shapes, &c. It is as Economical as Convenient.

---

**SYMINGTON'S**

" EDINBURGH "

**ESSENCE OF COFFEE  
AND CHICORY**

IS THE ESSENCE OF COFFEE FOR THE MILLION.

---

SILVER MEDAL AWARDED FRENCH COOKERY EXHIBITION, 1887.

GOLD MEDALS, CALCUTTA AND NEW ZEALAND EXHIBITIONS.

---

**THOMAS SYMINGTON & CO., Chemists,**  
EDINBURGH and LONDON.

---